

1. DISCONNECT AND REMOVE ALL PREVIOUSLY ABANDONED PIPING, REMOVE EXISTING/ABANDONED HANGERS AND SUPPORTS IF DEEMED NOT REUSABLE.
2. ALL PIPING SHOWN IS BASED ON ORIGINAL DRAWINGS AND FIELD VERIFICATION OF MAINS. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL MAINS AND TO VERIFY ALL EXISTING CONDITIONS OF BRANCH PIPING TO INDIVIDUAL AND GANG-FITTING LOCATIONS. ALL DEMOLISHED PIPING SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR.
3. ALL PIPING ASSOCIATED WITH EXISTING SYSTEMS TO BE REMOVED SHALL BE DEMOLISHED. NO PIPING SHALL BE ABANDONED.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR DRAINING PIPING SYSTEMS TO BE CUT, CAPPED, OR REMOVED. DISCHARGE FROM SUCH SYSTEMS SHALL BE APPROPRIATELY DISPOSED BY FEDERAL, STATE AND LOCAL AGENCIES.
5. THE CONTRACTOR SHALL COORDINATE WITH AN OWNER PROVIDED LIST OF ANY EQUIPMENT THE MAINTENANCE DEPARTMENT MAY WISH TO RETAIN AFTER REMOVAL. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL AND/OR DEMOLISHED EQUIPMENT THE OWNER CHOOSES NOT TO RETAIN.
6. ALL PLUMBING FIXTURES AND/OR ARCHITECTURAL FEATURES TEMPORARILY REMOVED DURING DEMOLITION FOR ACCESS TO DEMO AND/OR NEW WORK AND FUTURE RECONNECT/REINSTALLATION, SHALL BE REINSTALLED UNDER NEW WORK REQUIRED BY THESE DRAWINGS. ALL REPOSED WORK SHALL BE REINFORCED AND FINISHED TO ORIGINAL CONDITION OR REPLACED WITH NEW UNDER THIS CONTRACT.
7. COORDINATE WITH GENERAL CONTRACTOR FOR FLOOR, WALL AND ROOF PATCHING REQUIRED DUE TO POWER LINE REMOVAL. PROVIDE FOR THE EXISTING AND INSTALLATION OF NEW MECHANICAL EQUIPMENT AND COMPONENTS.
8. REFER TO SPECIFICATIONS FOR UTILITY TIE-IN AND DISRUPTION REQUIREMENTS.
9. (48) FORTY-EIGHT HOUR WRITTEN NOTICE SHALL BE GIVEN TO THE OWNER PRIOR TO DISRUPTION OF UTILITIES OR SERVICES TO OR WITHIN THE BUILDING, SUBJECT TO THE OWNER'S APPROVAL. SEE SPECIFICATION SECTION 01 00 00 GENERAL REQUIREMENTS.
10. CONTRACTOR SHALL BE RESPONSIBLE FOR THE DEMOLITION ALL OTHER PLUMBING FIXTURES AND ASSOCIATED PIPING NOT SHOWN ON THIS PLAN BUT IS LOCATED WITHIN THE PROJECT FOOTPRINT.

- 7 REMOVE EXISTING STORM PIPING
- 8 REMOVE EXISTING WASTE PIPING
- 9 REMOVE EXISTING OXYGEN FAN ENOUGH EAST (APPROXIMATELY 15'-0" FROM EDGE OF BUILDING) TO BE SAFE FROM ALL EXCAVATION ASSOCIATED WITH BUILDING DEMOLITION.
- 10 REFER TO DRAWING FOR REMOVAL OF EXISTING OXYGEN FAN
- 11 REMOVE EXISTING ABANDONED FUEL OIL LINES UNDER SLAB FROM ABANDONED FUEL OIL TANK IN LOADING DOOR AREA TO BUILDING #38
- 12 REMOVE EXISTING TRENCH DRAIN AND ASSOCIATED WASTE PIPING.
- 13 EXISTING STORM MAIN WITHIN THIS AREA SHALL REMAIN IN SERVICE UNTIL NEW STORM SERVICE IS INSTALLED AND OPERATIONAL. PROVIDE TEMPORARY CAPS AS NECESSARY. COORDINATE LOCATION OF EXISTING MANHOLE AND INSTALLATION OF NEW MAIN WITH INSTALLATION OF NEW MAIN PRESSURE PIERS. REFER TO SHEET 2-51, AND WITH INSTALLATION OF NEW STORM SERVICE, REFER TO SHEET 2-C7.
- 14 EXISTING SANITARY MAIN WITHIN THIS AREA SHALL REMAIN IN SERVICE UNTIL NEW SANITARY SERVICE IS INSTALLED AND OPERATIONAL. PROVIDE TEMPORARY CAPS AS NECESSARY. COORDINATE LOCATION OF EXISTING MANHOLE AND INSTALLATION OF NEW MAIN WITH INSTALLATION OF NEW STRUCTURAL PIERS. REFER TO SHEET 2-S1.
- 15 REMOVE EXISTING STORM UP, CAP BELOW FLOOR.

SHUTDOWN SHALL BE LIMITED TO 12 HOURS AND SHALL INCLUDE THE CONNECTIONS TO EXISTING NOTED ABOVE AND RECERTIFICATION OF EXISTING OXYGEN SYSTEM THROUGHOUT THE HOSPITAL. REFER TO SHEET 2-P3 FOR PROPOSED LOCATION AND NUMBER OF OUTLETS TO BE RECERTIFIED. MEDICAL GAS CERTIFIER SHALL PROPERLY MAN THE PROJECT TO MEET SHUTDOWN REQUIREMENTS.



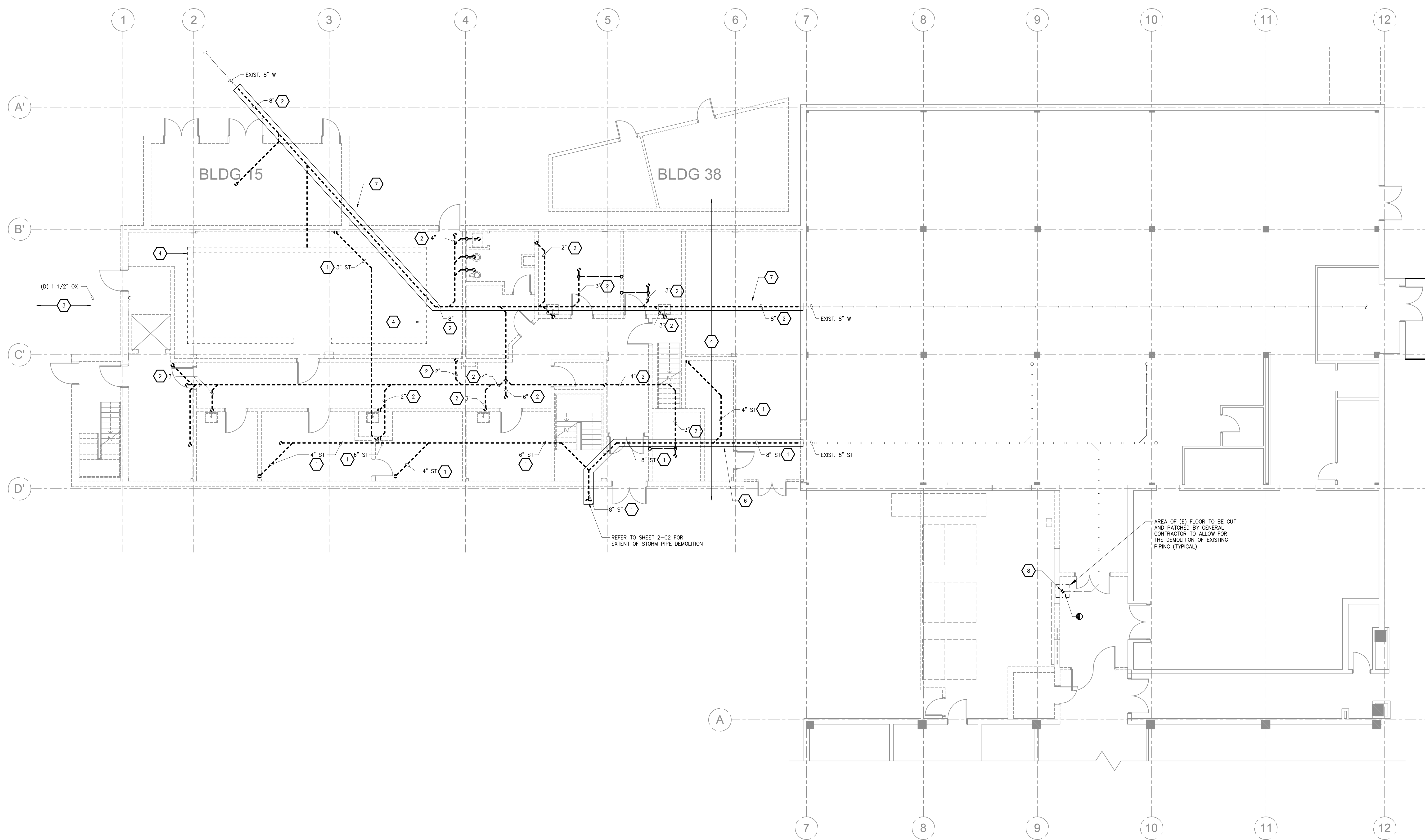
Date 12-17-2012
CONSTRUCTION
DOCUMENTS

Project No.
DVA#636-311
S-H#110240-0

DRAWING NO.

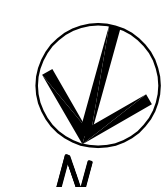
2-PD0
Dwg. 1 Of 24

Veterans



REFER TO SHEET 2-C2 FOR
EXTENT OF STORM PIPE DEMOLITION

AREA OF (E) FLOOR TO BE CUT
AND PATCHED BY GENERAL
CONTRACTOR TO ALLOW FOR
THE DEMOLITION OF EXISTING
PIPING (TYPICAL)


$$\overline{1/8^* - 1'-0^*}$$

Revisions	Date

SHIVE+ATTERY
ARCHITECTURE+ENGINEERING

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Iowa | Illinois | Missouri

	Drawing Title
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UNDERFLOOR PLUMBING DEMOLITION PLAN

Approved: Division Chief

Approved: Service Director

	Project Title
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RENOVATE AND EXPAND SPACE FOR PATIENT SUPPORT AREAS

	Building Number
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Location	IOWA CITY VA HEALTH CARE SYSTEM IOWA CITY, IOWA		

1. DISCONNECT AND REMOVE ALL PREVIOUSLY ABANDONED PIPING, REMOVED EXISTING/ABANDONED HANGERS AND SUPPORTS IF DEEMED NOT REUSABLE.
2. ALL PIPING SHOWN IS BASED ON ORIGINAL DRAWINGS AND FIELD VERIFICATION OF THE CONTRACTOR SHALL BE REQUIRED TO VERIFY THE LOCATION AND TO VERIFY ALL EXISTING CONDITIONS OF BRANCH PIPING TO INDIVIDUAL AND GANG-FIXTURE LOCATIONS. ALL DEMOLISHED PIPING SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR.
3. ALL PIPING ASSOCIATED WITH EXISTING SYSTEMS TO BE REMOVED SHALL BE DEMOLISHED. NO PIPING SHALL BE ABANDONED.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DRAINING PIPING SYSTEMS TO BE CUT, CAPPED, OR REMOVED. ALL SUCH SYSTEMS SHALL BE APPROPRIATELY DISPOSED PER FEDERAL, STATE AND LOCAL REQUIREMENTS.
5. THE CONTRACTOR SHALL COORDINATE WITH AN OWNER PROVIDED LIST OF ANY EQUIPMENT THE MAINTENANCE DEPARTMENT MAY WISH TO RETAIN AFTER REMOVAL. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL AND/OR DEMOLISHED EQUIPMENT THE OWNER CHOOSES NOT TO RETAIN.
6. ALL PLUMBING FIXTURES AND/OR ARCHITECTURAL FEATURES TEMPORARILY REMOVED DURING DEMOLITION FOR ACCESS TO DEMO AND/OR NEW WORK AND REPAIR RECONNECTION SHALL BE REINSTALLED OR REPLACED UNDER WORK REQUIRED ON THESE DRAWINGS. ALL COMPONENTS SHALL BE REINSTALLED AND FINISHED TO ORIGINAL CONDITION OR REPLACED WITH NEW UNDER THIS CONTRACT.
7. COORDINATE WITH GENERAL CONTRACTOR FOR FLOOR, WALL AND ROOF PATCHING REQUIRED TO PERFORM REMEDIATION WORK. REPAIR OR REPLACE EXISTING AND INSTALLATION OF NEW MECHANICAL EQUIPMENT AND COMPONENTS.
8. REFER TO SPECIFICATIONS FOR UTILITY TIE-IN AND DISRUPTION REQUIREMENTS.
9. (48) FORTY-EIGHT HOUR WRITTEN NOTICE BE GIVEN TO THE OWNER PRIOR TO DISRUPTION OF UTILITIES OR SERVICES TO OR WITHIN THE BUILDING, SUBJECT TO THE OWNER'S APPROVAL. SEE SPECIFICATION SECTION 05.00 GENERAL REQUIREMENTS.
10. CONTRACTOR SHALL BE RESPONSIBLE FOR THE DEMOLITION ALL OTHER PLUMBING SYSTEMS AND ASSOCIATED EQUIPMENT NOT SHOWN ON THIS PLAN BUT IS LOCATED WITHIN THE PROJECT BOUNDARY.

- 1 REMOVE EXISTING OXYGEN MAN.
- 2 REMOVE EXISTING SHOWER AND ASSOCIATED PIPING.
- 3 REMOVE EXISTING LAVATORY AND ASSOCIATED PIPING.
- 4 REMOVE EXISTING WATER CLOSET AND ASSOCIATED PIPING.
- 5 REMOVE EXISTING SINK AND ASSOCIATED PIPING.
- 6 REMOVE EXISTING CW AND HW TO CAGE WASHER.
- 7 REMOVE EXISTING STORM PIPING.
- 8 REMOVE EXISTING HYDRAULIC FLUID AND PIPING LOCATED WITHIN ELEVATOR SHAFT AND ELEVATOR EQUIPMENT ROOM.
- 9 REMOVE EXISTING TRENCH DRAIN.
- 10 REMOVE EXISTING AIR COMPRESSOR.
- 11 REMOVE EXISTING ABANDONED FUEL OIL LINES, REFER TO SHEET 2-PDO FOR REMOVAL OF PIPING UNDER THE BUILDING.
- 12 REMOVE EXISTING EMERGENCY SHOWER/EYE WASH AND PIPING.

SHUTDOWN SHALL BE LIMITED TO 12 HOURS AND SHALL INCLUDE THE CONNECTIONS TO EXISTING NOTED ABOVE AND RECERTIFICATION OF EXISTING OXYGEN SYSTEM THROUGHOUT THE HOSPITAL. REFER TO SHEET 2-P3 FOR PROPOSED LOCATION AND NUMBER OF OUTLETS TO BE RECERTIFIED. MEDICAL GAS CERTIFIER SHALL PROPERLY MAN THE PROJECT TO MEET SHUTDOWN REQUIREMENTS.



Date 12-17-2012
CONSTRUCTION
DOCUMENTS

Project No.
DVA#636-311
S-H#110240-0

DRAWING NO.

9. PD1

2-PD1

Dwg. 2 Of 24

1

100

Veterans Administration

$$\frac{1}{8}'' - 1'-0''$$

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Iowa | Illinois | Missouri

**FIRST FLOOR
PLUMBING DEMOLITION PLAN**

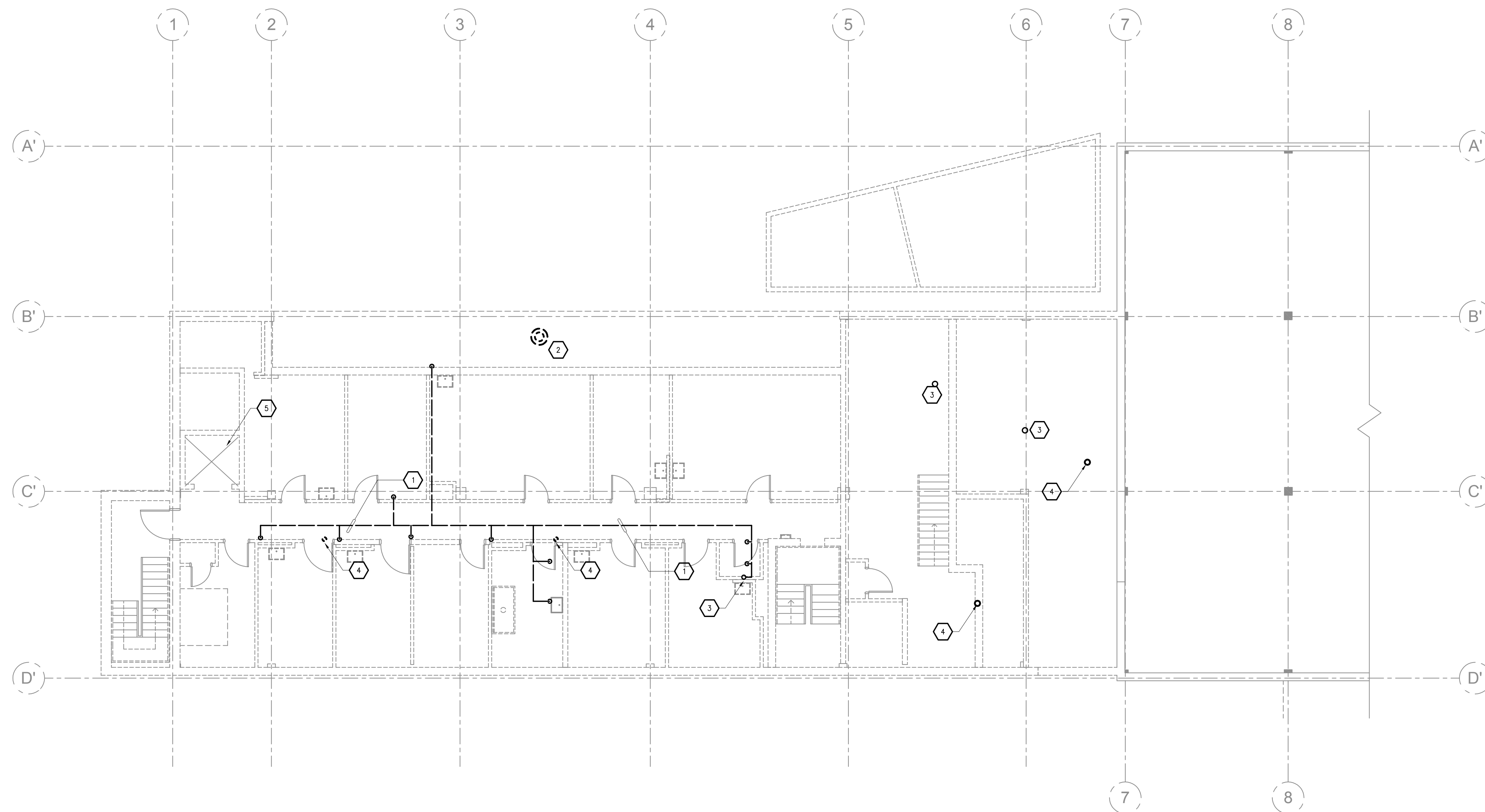
Approved: Service Director

RENOVATE AND EXPAND SPACE FOR PATIENT SUPPORT AREAS

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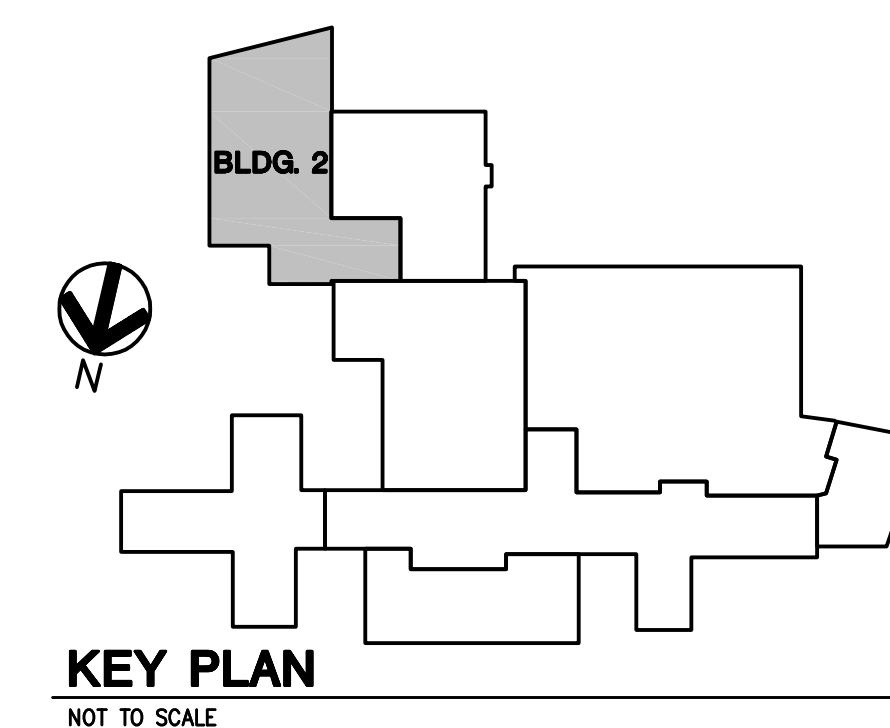


GENERAL PLUMBING DEMOLITION NOTES:

1. DISCONNECT AND REMOVE ALL PREVIOUSLY ABANDONED PIPING, REMOVE EXISTING/ABANDONED HANGERS AND SUPPORTS IF DEEMED NOT REUSABLE.
2. ALL PIPING SHOWN IS BASED ON ORIGINAL DRAWINGS AND FIELD VERIFICATION OF MAIN CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY AND TO VERIFY ALL EXISTING CONDITIONS OF BRANCH PIPING TO INDIVIDUAL AND GANG-FIXTURE LOCATIONS. ALL DEMOLISHED PIPING SHALL BE REMOVED AND DISPOSED OF AT THE CONTRACTOR'S EXPENSE.
3. GANG-PIPING ASSOCIATED WITH EXISTING SYSTEMS TO BE REMOVED SHALL BE DEMOLISHED. NO PIPING SHALL BE ABANDONED.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR DRAINING PIPING SYSTEMS TO BE CUT, CAPPED, OR REMOVED, DISCHARGE FROM SUCH SYSTEMS SHALL BE APPROPRIATELY DISPOSED BY THE FEDERAL, STATE AND LOCAL AGENCIES.
5. THE CONTRACTOR SHALL COORDINATE WITH AN OWNER PROVIDED LIST OF ANY EQUIPMENT THE MAINTENANCE DEPARTMENT MAY WISH TO RETAIN AFTER REMOVAL. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL, AND/OR DEMOLISHED EQUIPMENT THE OWNER CHOOSES NOT TO RETAIN.
6. ALL PLUMBING FIXTURES AND/OR ARCHITECTURAL FEATURES TEMPORARILY REMOVED DURING DEMOLITION FOR ACCESS TO DEMO AND/OR NEW WORK AND FUTURE RECONNECTION/REINSTALLATION, SHALL BE REINSTALLED UNDER WORK ORDER. THESE DRAWINGS SHALL BE USED TO RECONSTRUCT AND REINSTALLED FINISHED TO ORIGINAL CONDITION OR REPLACED WITH NEW UNDER THIS CONTRACT.
7. COORDINATE WITH GENERAL CONTRACTOR FOR FLOOR, WALL AND ROOF PATCHING TO BE REQUIRED TO REPAIR DAMAGE TO EXISTING SURFACES DURING DEMOLITION AND INSTALLATION OF NEW MECHANICAL EQUIPMENT AND COMPONENTS.
8. REFER TO SPECIFICATIONS FOR UTILITY TIE-IN AND DISRUPTION REQUIREMENTS.
9. (48) FORTY-EIGHT HOUR WRITTEN NOTICE SHALL BE GIVEN TO THE OWNER PRIOR TO DISRUPTION OF UTILITIES OR SERVICES TO OR WITHIN THE BUILDING, SUBJECT TO THE OWNER'S APPROVAL. SEE SPECIFICATION SECTION 01 00 00 GENERAL REQUIREMENTS.
10. CONTRACTOR SHALL BE RESPONSIBLE FOR THE DEMOLITION ALL OTHER PLUMBING FIXTURES AND ASSOCIATED PIPING NOT SHOWN ON THIS PLAN BUT IS LOCATED WITHIN THE PROJECT FOOTPRINT.

PLUMBING DEMOLITION KEYED NOTES:

- | | |
|---|-------------------------------------------------------------------------------------------------------|
| 1 | REMOVE EXISTING VENT PIPING. |
| 2 | REMOVE ROOF DRAINS. |
| 3 | REMOVE VENT THRU ROOF. |
| 4 | REMOVE EXISTING STORM PIPING UP TO ROOF DRAIN. |
| 5 | REMOVE EXISTING HYDRAULIC FLUID AND PIPING LOCATED WITHIN ELEVATOR SHAFT AND ELEVATOR EQUIPMENT ROOM. |



KEY PLAN
NOT TO SCALE

2-2

Project No.
DVA#636-311
S-H#110240-0

DRAWING NO.

2-PD2

Dwg. 3 Of 24

**Veterans
Administration**

SECOND FLOOR - PLUMBING DEMOLITION PLAN

$$\frac{1}{8}'' - 1'-0''$$

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ARCHITECTURE+ENGINEERING

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319.354.3040 | fax: 319.354.6921 | shive-hattery.com
Iowa | Illinois | Missouri

	Drawing Title
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SECOND FLOOR PLUMBING DEMOLITION PLAN

Approved: Division Chief

Approved: Service Director

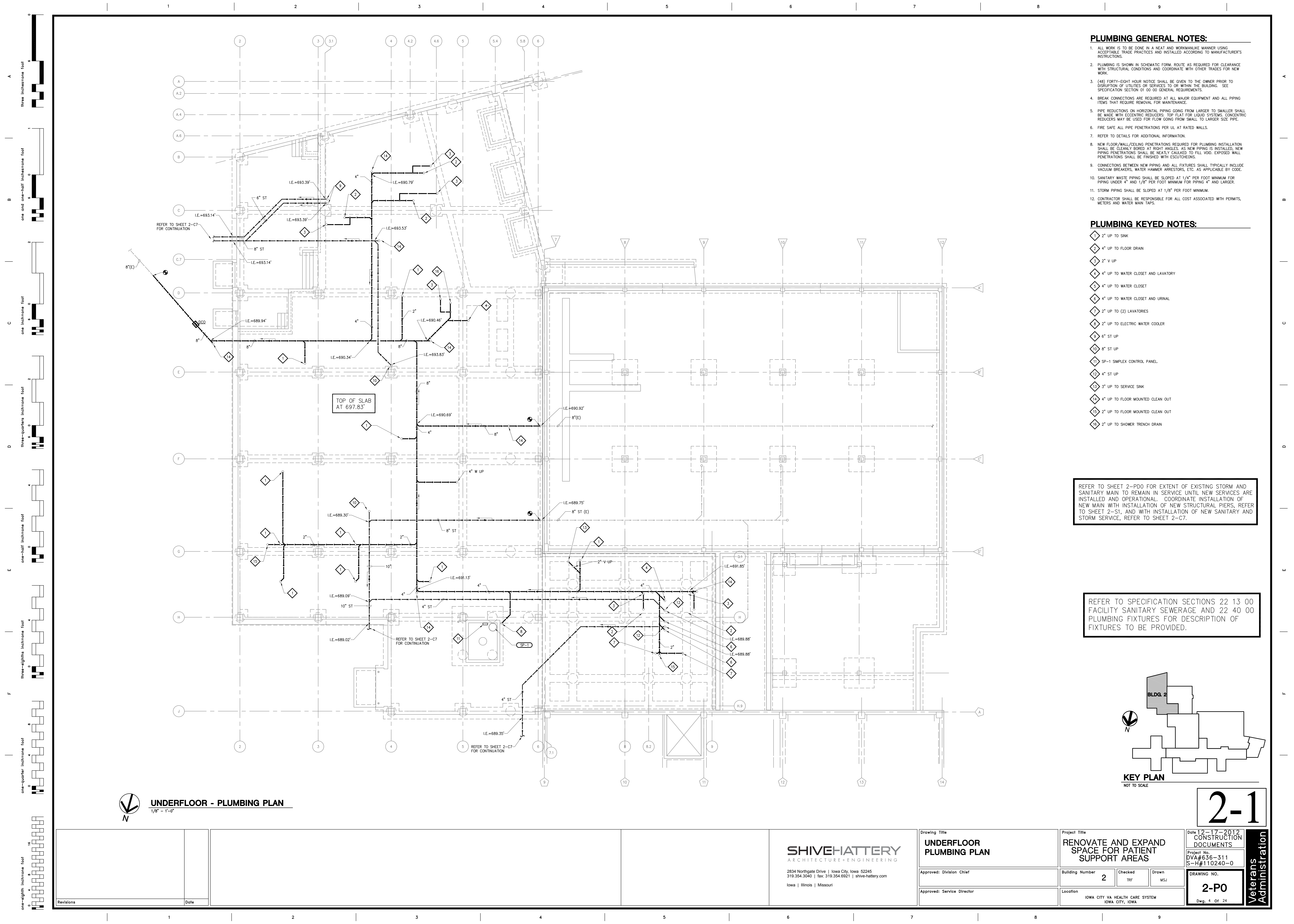
	Project Title
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RENOVATE AND EXPAND SPACE FOR PATIENT SUPPORT AREAS

	Building Number

Location	IOWA CITY VA HEALTH CARE SYSTEM IOWA CITY, IOWA
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Revisions	Date
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PLUMBING GENERAL NOTES:

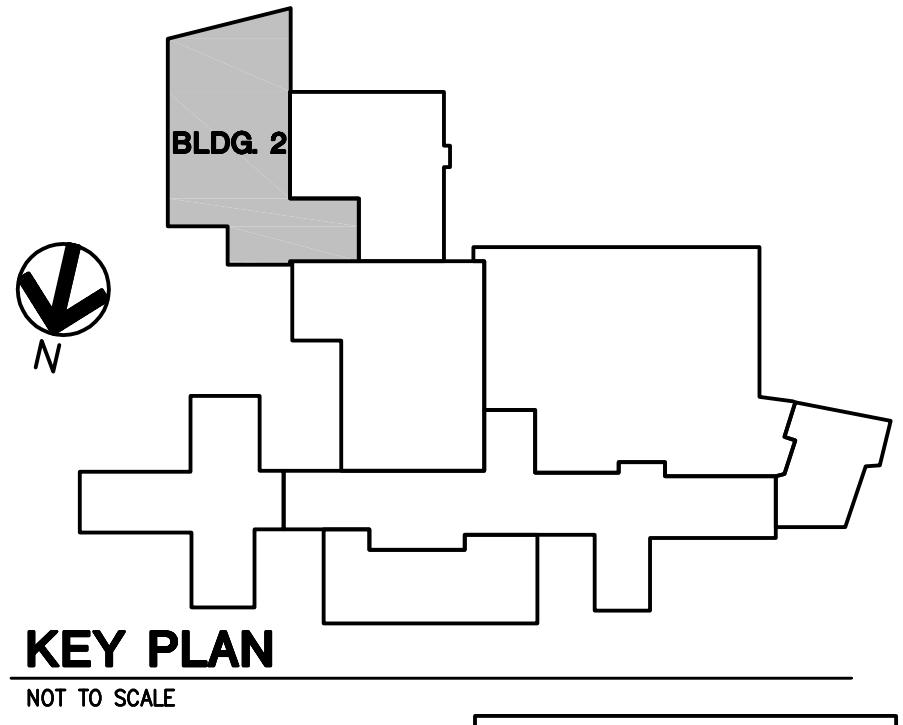
- 1. ALL WORK IS TO BE DONE IN A NEAT AND WORKMANLIKE MANNER USING ACCEPTABLE TRADE PRACTICES AND INSTALLED ACCORDING TO MANUFACTURER'S INSTRUCTIONS.
- 2. PLUMBING IS SHOWN IN SCHEMATIC FORM. ROUTE AS REQUIRED FOR CLEARANCE WITH STRUCTURAL CONDITIONS AND COORDINATE WITH OTHER TRADES FOR NEW WORK.
- 3. (48) FORTY-EIGHT HOUR NOTICE SHALL BE GIVEN TO THE OWNER PRIOR TO DISRUPTION OF UTILITIES OR SERVICES TO OR WITHIN THE BUILDING. SEE SPECIFICATION SECTION 01 00 00 GENERAL REQUIREMENTS.
- 4. BREAK CONNECTIONS ARE REQUIRED AT ALL MAJOR EQUIPMENT AND ALL PIPING ITEMS THAT REQUIRE REMOVAL FOR MAINTENANCE.
- 5. PIPE REDUCTIONS ON HORIZONTAL PIPING GOING FROM LARGER TO SMALLER SHALL BE MADE WITH ECCENTRIC REDUCERS. TOP FLAT FOR LIQUID SYSTEMS. CONCENTRIC REDUCERS MAY BE USED FOR FLOW GOING FROM SMALL TO LARGER SIZE PIPE.
- 6. FIRE SAFE ALL PIPE PENETRATIONS PER UL AT RATED WALLS.
- 7. REFER TO DETAILS FOR ADDITIONAL INFORMATION.
- 8. NEW FLOOR/WALL/CEILING PENETRATIONS REQUIRED FOR PLUMBING INSTALLATION SHALL BE CLEANLY BORED AT RIGHT ANGLES. AS NEW PIPING IS INSTALLED, NEW PIPING PENETRATIONS SHALL BE NEATLY CALKED TO FILL VOID. EXPOSED WALL PENETRATIONS SHALL BE FINISHED WITH ESCUTCHEONS.
- 9. CONNECTIONS BETWEEN NEW PIPING AND ALL FIXTURES SHALL TYPICALLY INCLUDE VACUUM BREAKERS, WATER HAMMER ARRESTORS, ETC. AS APPLICABLE BY CODE.
- 10. SANITARY WASTE PIPING SHALL BE SLOPED AT 1/4" PER FOOT MINIMUM FOR PIPING UNDER 4" AND 1/8" PER FOOT MINIMUM FOR PIPING 4" AND LARGER.
- 11. STORM PIPING SHALL BE SLOPED AT 1/8" PER FOOT MINIMUM.
- 12. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COST ASSOCIATED WITH PERMITS, METERS AND WATER MAIN TAPS.

PLUMBING KEYED NOTES:

- 1 2" UP TO SINK
- 2 4" UP TO FLOOR DRAIN
- 3 2" V UP
- 4 4" UP TO WATER CLOSET AND LAVATORY
- 5 4" UP TO WATER CLOSET
- 6 4" UP TO WATER CLOSET AND URINAL
- 7 2" UP TO (2) LAVATORIES
- 8 2" UP TO ELECTRIC WATER COOLER
- 9 6" ST UP
- 10 8" ST UP
- 11 SP-1 SIMPLEX CONTROL PANEL
- 12 4" ST UP
- 13 3" UP TO SERVICE SINK
- 14 4" UP TO FLOOR MOUNTED CLEAN OUT
- 15 2" UP TO FLOOR MOUNTED CLEAN OUT
- 16 2" UP TO SHOWER TRENCH DRAIN

REFER TO SHEET 2-PDO FOR EXTENT OF EXISTING STORM AND SANITARY MAIN TO REMAIN IN SERVICE UNTIL NEW SERVICES ARE INSTALLED AND OPERATIONAL. COORDINATE INSTALLATION OF NEW MAIN WITH INSTALLATION OF NEW STRUCTURAL PIERS. REFER TO SHEET 2-S1 AND WITH INSTALLATION OF NEW SANITARY AND STORM SERVICE, REFER TO SHEET 2-C7.

REFER TO SPECIFICATION SECTIONS 22 13 00 FACILITY SANITARY SEWERAGE AND 22 40 00 PLUMBING FIXTURES FOR DESCRIPTION OF FIXTURES TO BE PROVIDED.



2-1

Revisions

Date

SHIVEHATTERY
ARCHITECTURE+ENGINEERING

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Iowa | Illinois | Missouri

Drawing Title

**UNDERFLOOR
PLUMBING PLAN**

Approved: Division Chief

Approved: Service Director

Project Title

**RENOVATE AND EXPAND
SPACE FOR PATIENT
SUPPORT AREAS**

Building Number

2

Checked

TRF

Drawn

MSJ

Location

IOWA CITY VA HEALTH CARE SYSTEM
IOWA CITY, IOWA

Date

12-17-2012

CONSTRUCTION
DOCUMENTS

Project No.

DVA#636-311
S-H#110240-0

DRAWING NO.

2-P0

Dwg. 4 Of 24

Veterans
Administration

PLUMBING GENERAL NOTES:

1. ALL WORK IS TO BE DONE IN A NEAT AND WORKMANLIKE MANNER USING ACCEPTABLE TRADE PRACTICES AND INSTALLED ACCORDING TO MANUFACTURER'S INSTRUCTIONS.
2. PLUMBING IS SHOWN IN SCHEMATIC FORM. ROUTE AS REQUIRED FOR CLEARANCE WITH STRUCTURAL CONDITIONS AND COORDINATE WITH OTHER TRADES FOR NEW WORK.
3. (48) FORTY-EIGHT HOUR NOTICE SHALL BE GIVEN TO THE OWNER PRIOR TO DISRUPTION OF UTILITIES OR SERVICES TO OR WITHIN THE BUILDING. SEE SPECIFICATION SECTION 01 00 00 GENERAL REQUIREMENTS.
4. BREAK CONNECTIONS ARE REQUIRED AT ALL MAJOR EQUIPMENT AND ALL PIPING ITEMS THAT REQUIRE REMOVAL FOR MAINTENANCE.
5. PIPE REDUCTIONS ON HORIZONTAL PIPING GOING FROM LARGER TO SMALLER SHALL BE MADE WITH ECCENTRIC REDUCERS. TOP FLAT FOR LIQUID SYSTEMS. CONCENTRIC REDUCERS MAY BE USED FOR FLOW GOING FROM SMALL TO LARGER SIZE PIPE.
6. FIRE SAFE ALL PIPE PENETRATIONS PER UL AT RATED WALLS.
7. REFER TO DETAILS FOR ADDITIONAL INFORMATION.
8. NEW FLOOR/WALL/CEILING PENETRATIONS REQUIRED FOR PLUMBING INSTALLATION SHALL BE CLEANLY BORED AT RIGHT ANGLES. AS NEW PIPING IS INSTALLED, NEW PIPING PENETRATIONS SHALL BE NEATLY CAULKED TO FILL VOID. EXPOSED WALL PENETRATIONS SHALL BE FINISHED WITH ESCUTCHEONS.
9. CONNECTIONS BETWEEN NEW PIPING AND ALL FIXTURES SHALL TYPICALLY INCLUDE VACUUM BREAKERS, WATER HAMMER ARRESTORS, ETC. AS APPLICABLE BY CODE.
10. SANITARY WASTE PIPING SHALL BE SLOPED AT 1/4" PER FOOT MINIMUM FOR PIPING UNDER 4" AND 1/8" PER FOOT MINIMUM FOR PIPING 4" AND LARGER.
11. STORM PIPING SHALL BE SLOPED AT 1/8" PER FOOT MINIMUM.
12. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COST ASSOCIATED WITH PERMITS, METERS AND WATER MAIN TAPS.

PLUMBING KEYED NOTES:

- | | |
|---------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 4" ST UP TO ROOF DRAIN. | 24 2" V UP. |
| 2 4" ST DOWN. | 25 4" W UP TO WATER CLOSET. |
| 3 8" ST UP. | 26 3" W UP TO URINAL. |
| 4 8" ST DOWN. | 27 2" W UP TO (2) LAVATORIES. |
| 5 1 1/2" V, 3/4" CW, AND 3/4" HW DOWN TO SINK. | 28 3" W UP TO URINAL AND (2) LAVATORIES. |
| 6 2" V DOWN. | 29 3/4" CW DOWN TO HOSE BIBB. |
| 7 2 1/2" V UP, 3" VTR. | 30 6" ST UP TO ROOF DRAIN. |
| 8 3/4" CW AND HW DOWN TO SHOWER. | 31 6" STORM DOWN. |
| 9 1 1/2" V DOWN. | 32 MEDICAL GAS VALVE BOX FOR 3/4" MA AND 1" VAC. |
| 10 1/2" CW AND HW DOWN TO LAVATORY. | 33 NITROGEN MANIFOLD FOR OWNER SUPPLIED TANKS. ROUTE 1/2" NITROGEN TO FREEZER IN REFRIGERATION ROOM 116. |
| 11 2" V AND 1 1/4" CW DOWN TO WATER CLOSET. | 34 1 1/4" TEMPERED WATER DOWN TO EMERGENCY SHOWER. |
| 12 1/2" VAC, MA, AND GAS DOWN TO FUME HOOD. | 35 2" TEMPERED WATER LOOP DOWN IN WALL, ROUTE 1" TEMPERED WATER TO EMERGENCY EYE WASH. |
| 13 1 1/2" V, 3/4" CW AND 3/4" HW DOWN. ROUTE IN CABINET TO SINK. REFER TO ISLAND SINK DETAIL ON SHEET 2-P6. | 36 1" TEMPERED WATER LOOP DOWN IN WALL, ROUTE 1" TEMPERED WATER IN CABINET TO EMERGENCY EYE WASH. |
| 14 1 1/2" V, 3/4" CW, 3/4" HW, 1/2" MA AND VAC DOWN. ROUTE IN CABINET TO SINK. REFER TO ISLAND SINK DETAIL ON SHEET 2-P6. | 37 MEDICAL GAS ALARM. |
| 15 1/2" VAC DOWN TO BIOGARD HOOD. | 38 1/2" CW DOWN TO WALL HYDRANT. |
| 16 1/2" MA AND VAC DOWN TO OUTLETS. | 39 1 1/2" CW, 1 1/2" HW AND 2" TEMPERED WATER DOWN TO WALL MOUNTED MIXING VALVE. REFER TO DETAIL ON SHEET 2-P5. |
| 17 1 1/2" V AND 1 1/2" CW DOWN TO ELECTRIC WATER COOLER. | 40 3/4" CW DOWN FOR HEATING HOT WATER MAKE-UP. |
| 18 2" CW, 1" HW, AND 3/4" HWC UP. | 41 3/4" DOUBLE CHECK BACKFLOW PREVENTER. |
| 19 1 1/2" V, 3/4" CW AND 3/4" HW DOWN TO (2) LAVATORIES. | 42 3/4" CW DOWN TO HUMIDIFIER HEAT EXCHANGER AND 3/4" CW TO CONDENSATE COOLER. REFER TO DETAIL 8/2-H9. |
| 20 2" V AND 1 1/2" CW DOWN TO (2) WATER CLOSETS. | 43 1/2" CW DOWN RO WATER GENERATION SYSTEM. |
| 21 2" V AND 1 1/2" CW DOWN TO WATER CLOSET AND URINAL. | 44 RO WATER GENERATION SYSTEM (MILLIPORE BIOS 50 REVERSE OSMOSIS WATER PURIFICATION SYSTEM AND 600 LITER STORAGE). PROVIDE 120 V/1 PHASE/70 AMP ELECTRICAL CONNECTION. |
| 22 2" V, 3/4" CW AND 3/4" HW DOWN TO MOP SINK AND SINK. | 45 1/2" DI AND 1/2" DIC DOWN TO RO/DI WATER GENERATION SYSTEM. |
| 23 2" W UP TO SINK. | 46 1/2" RO AND 1/2" ROC DOWN. ROUTE IN CABINET TO DECK MOUNTED RO FAUCET AND ULTRAPURE WATER SYSTEM. |
| | 47 SUMP PUMP SP-1 REMOTE ALARM. |
| | 48 1 1/4" TEMPERED WATER TO EMERGENCY SHOWER/EYE WASH UNIT. |
| | 49 MILLIPORE MILLI-Q ULTRAPURE WATER POLISHING SYSTEM (MOUNT BELOW CABINET ON FLOOR AND ROUTE RECIRCULATION LOOP TO DECK MOUNTED DISPENSER). |

MEDICAL AIR PIPE SIZING:
ASSUME 1 CFM PER OUTLET WITH MAXIMUM PRESSURE LOSS OF 0.50 PSI PER 100 FT.

MEDICAL VACUUM PIPE SIZING:
ASSUME 1 CFM PER INLET WITH MAXIMUM PRESSURE LOSS OF 0.50 IN HG PER 100 FT.

OXYGEN PIPE SIZING:
ASSUME 20 LPM PER OUTLET WITH MAXIMUM PRESSURE LOSS OF 0.50 PSI PER 100 FT.

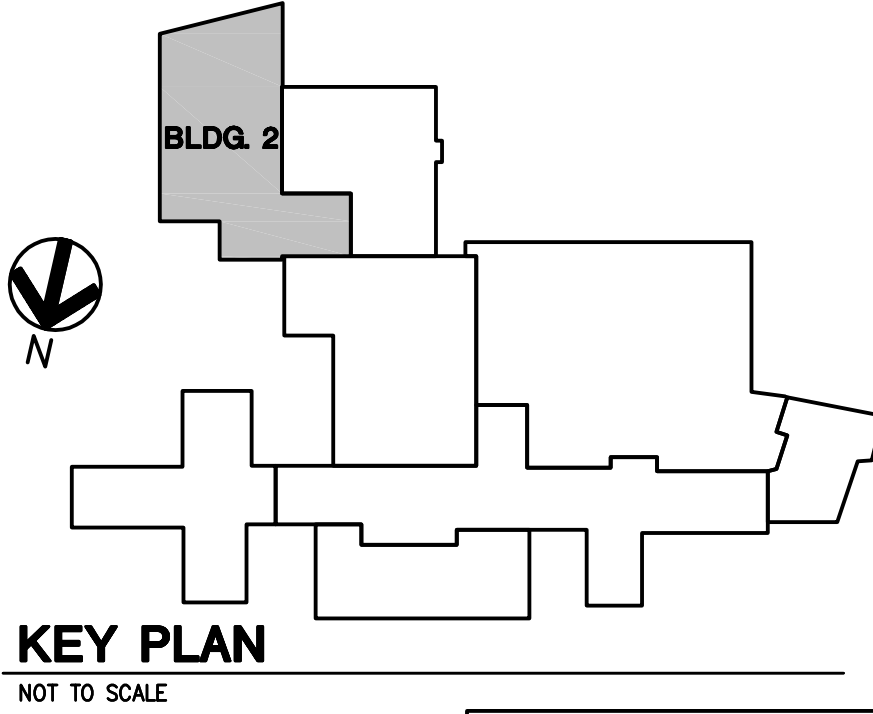
ALL NEW MA, VAC AND OX SHALL BE TESTED AND CERTIFIED PER NFPA 99 REQUIREMENTS.

REFER TO SPECIFICATION SECTIONS 22 13 00 FACILITY SANITARY SEWERAGE AND 22 40 00 PLUMBING FIXTURES FOR DESCRIPTION OF FIXTURES TO BE PROVIDED.

EXISTING OXYGEN SERVICE SHALL REMAIN ACTIVE UNTIL NEW PIPING HAS BEEN INSTALLED, TESTED AND CERTIFIED AT WHICH POINT THE EXISTING OXYGEN SERVICE SHALL BE SHUT DOWN TO ALLOW FOR CONNECTING NEW TO EXISTING AT THE BULK STORAGE TANK AND WITHIN THE BUILDING (REFER TO SITE PLANS AND PLUMBING PLANS).

SHUTDOWN SHALL BE LIMITED TO 12 HOURS AND SHALL INCLUDE THE CONNECTIONS TO EXISTING NOTED ABOVE AND RECERTIFICATION OF EXISTING OXYGEN SYSTEM THROUGHOUT THE HOSPITAL. REFER TO SHEET 2-P3 FOR PROPOSED LOCATION AND NUMBER OF OUTLETS TO BE RECERTIFIED. MEDICAL GAS CERTIFIER SHALL PROPERLY MAN THE PROJECT TO MEET SHUTDOWN REQUIREMENTS.

OWNER SHALL PROVIDE BOTTLED OXYGEN DURING THE SHUTDOWN.



2-1

Veterans Administration

FIRST FLOOR - PLUMBING PLAN

1/8" = 1'-0"

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FIRST FLOOR
PLUMBING PLAN

Approved: Division Chief
Approved: Service Director

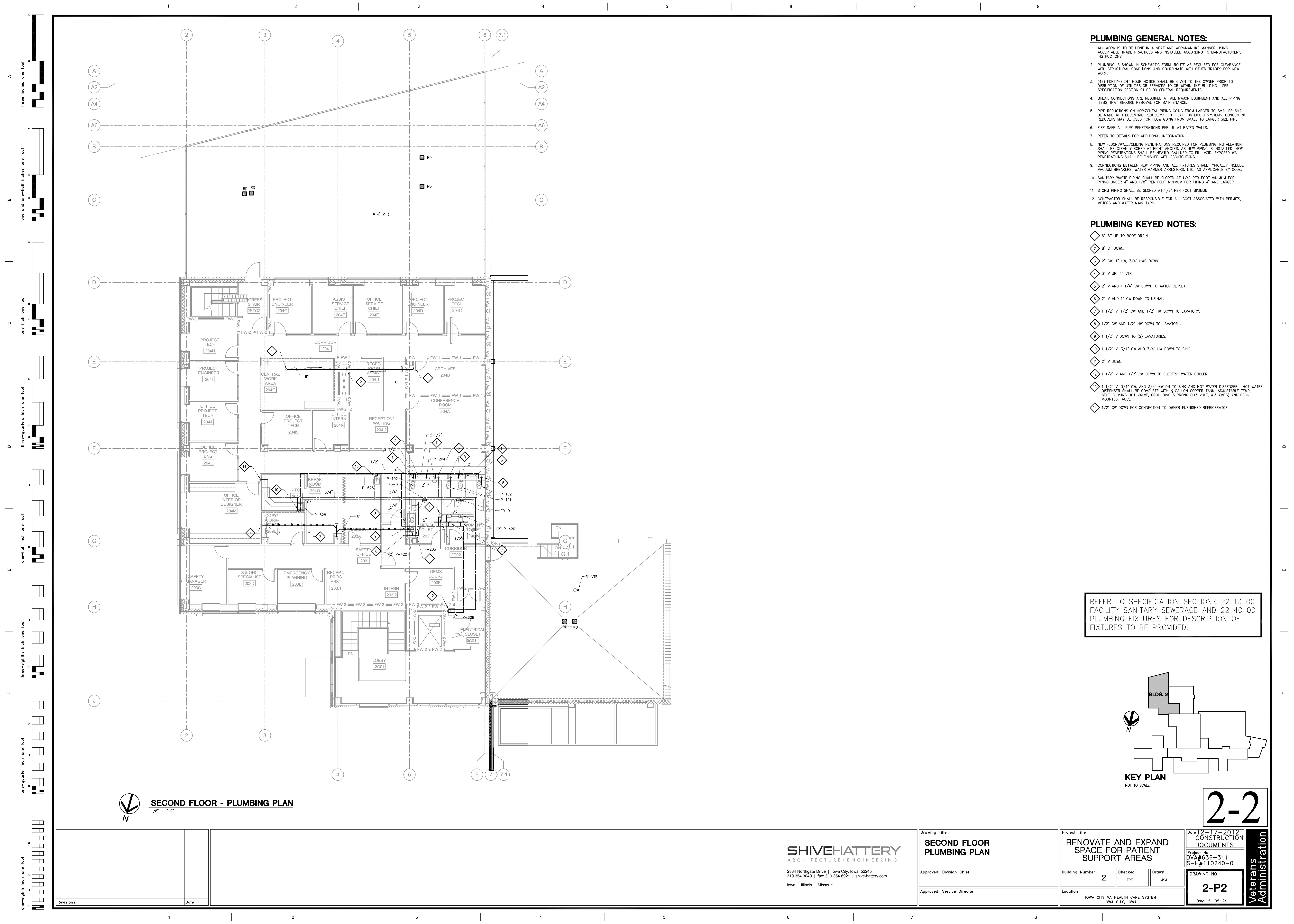
RENOVATE AND EXPAND
SPACE FOR PATIENT
SUPPORT AREAS

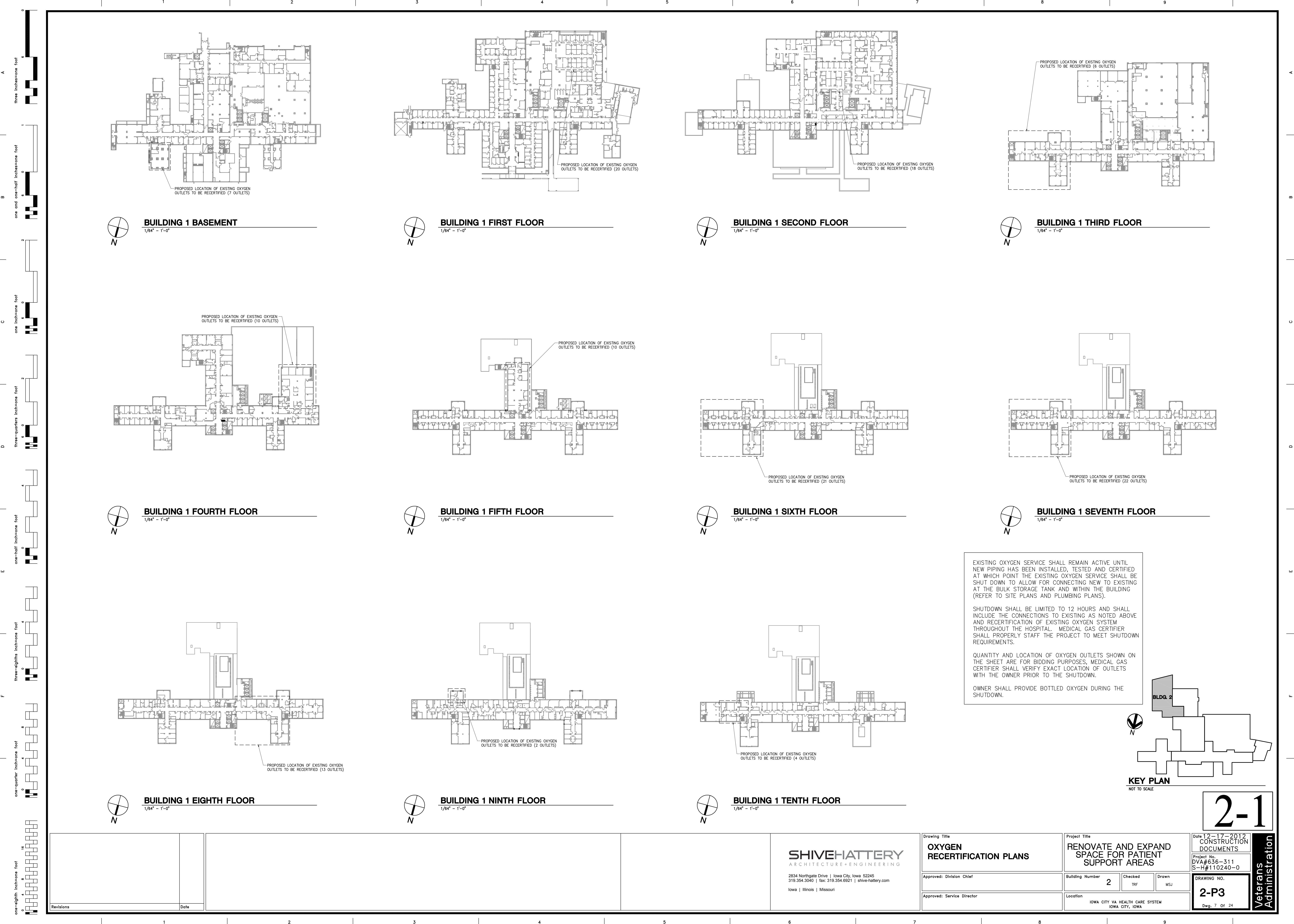
Building Number 2
Location IOWA CITY VA HEALTH CARE SYSTEM
IOWA CITY, IOWA

Date 12-17-2012
CONSTRUCTION DOCUMENTS

Project No. DVA#636-311
S-H#110240-0

DRAWING NO.
2-P1
Dwg. 5 of 24



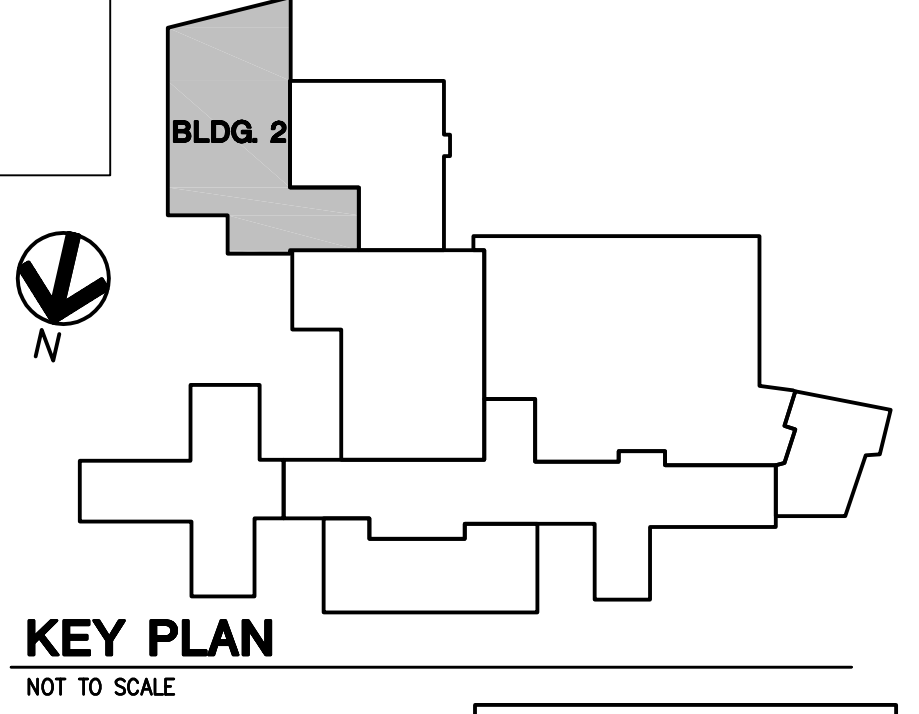


EXISTING OXYGEN SERVICE SHALL REMAIN ACTIVE UNTIL NEW PIPING HAS BEEN INSTALLED, TESTED AND CERTIFIED AT WHICH POINT THE EXISTING OXYGEN SERVICE SHALL BE SHUT DOWN TO ALLOW FOR CONNECTING NEW TO EXISTING AT THE BULK STORAGE TANK AND WITHIN THE BUILDING (REFER TO SITE PLANS AND PLUMBING PLANS).

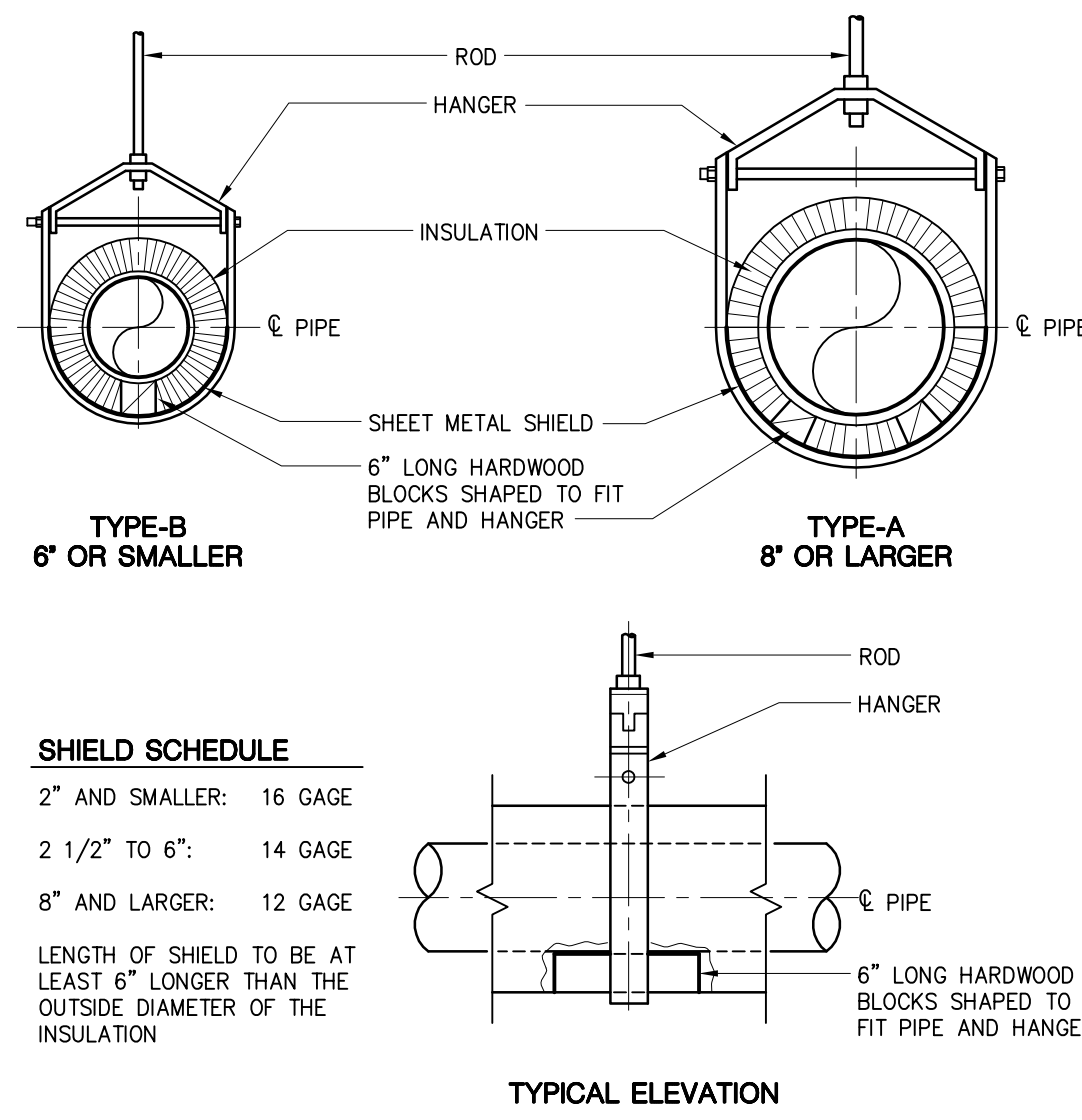
SHUTDOWN SHALL BE LIMITED TO 12 HOURS AND SHALL INCLUDE THE CONNECTIONS TO EXISTING AS NOTED ABOVE AND RECERTIFICATION OF EXISTING OXYGEN SYSTEM THROUGHOUT THE HOSPITAL. MEDICAL GAS CERTIFIER SHALL PROPERLY STAFF THE PROJECT TO MEET SHUTDOWN REQUIREMENTS.

QUANTITY AND LOCATION OF OXYGEN OUTLETS SHOWN ON THE SHEET ARE FOR BIDDING PURPOSES, MEDICAL GAS CERTIFIER SHALL VERIFY EXACT LOCATION OF OUTLETS WITH THE OWNER PRIOR TO THE SHUTDOWN.

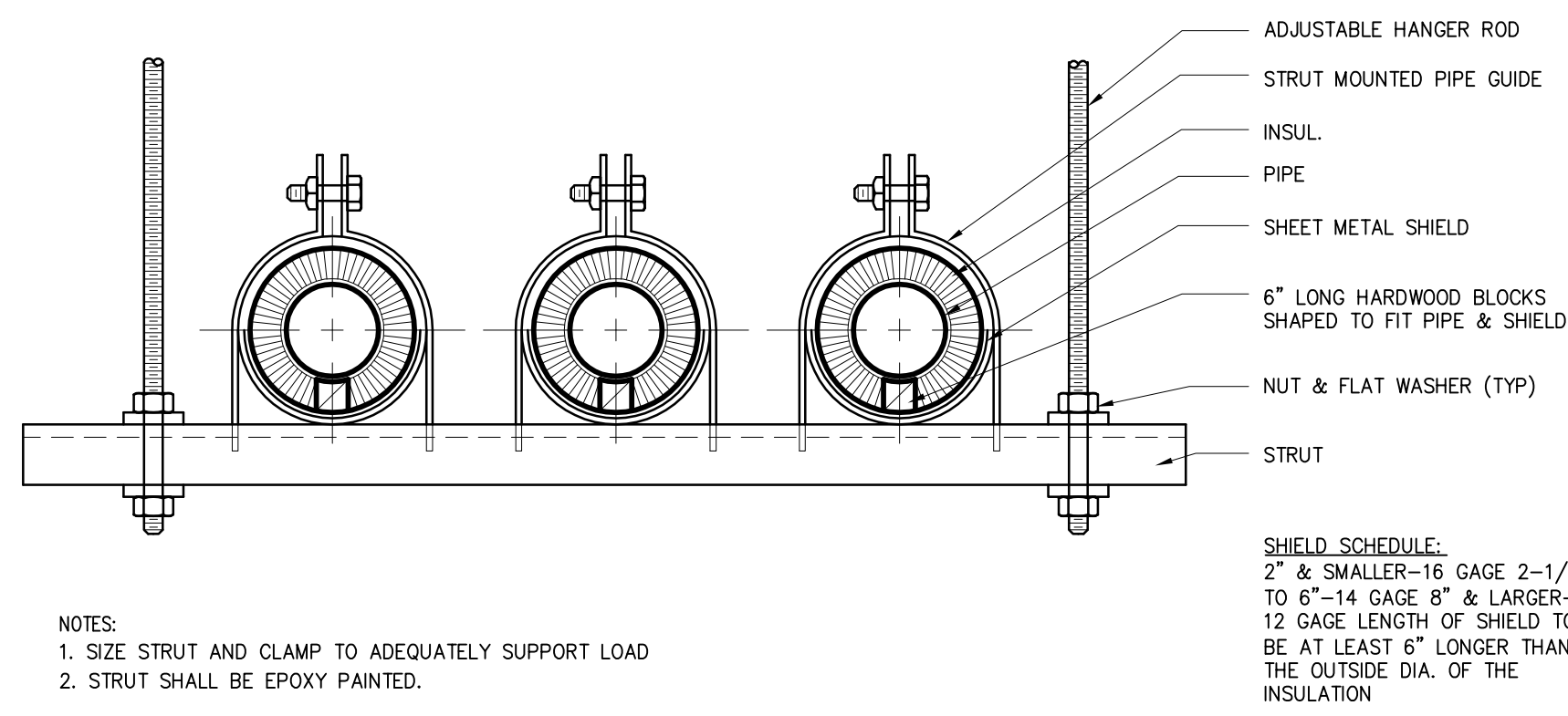
OWNER SHALL PROVIDE BOTTLED OXYGEN DURING THE SHUTDOWN.



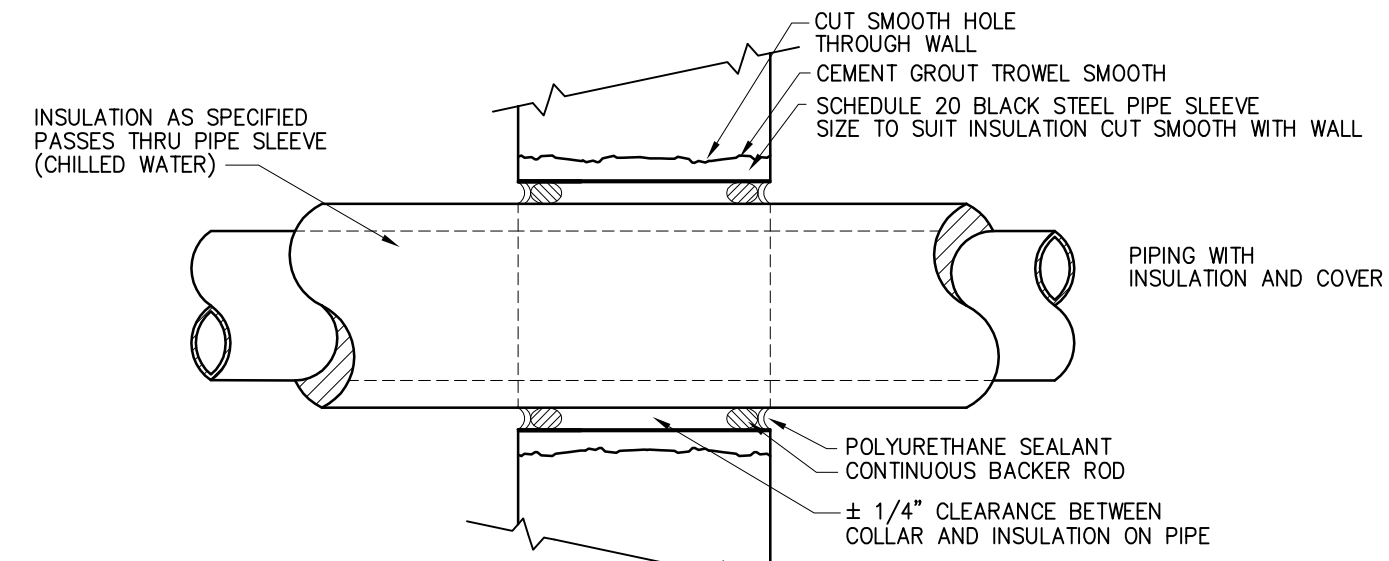
<div>Revisions</div> <div>Date</div>		<div>SHIVEHATTERY</div> <div>ARCHITECTURE+ENGINEERING</div> <div>2834 Northgate Drive Iowa City, Iowa 52245 319.354.3040 fax: 319.354.6921 shive-hattery.com Iowa Illinois Missouri</div>		<div>Drawing Title</div> <div>OXYGEN RECERTIFICATION PLANS</div> <div>Approved: Division Chief</div> <div>Approved: Service Director</div>		<div>Project Title</div> <div>RENOVATE AND EXPAND SPACE FOR PATIENT SUPPORT AREAS</div> <div>Building Number</div> <div>2</div> <div>Checked</div> <div>TRF</div> <div>Drawn</div> <div>MSJ</div> <div>Location</div> <div>IOWA CITY VA HEALTH CARE SYSTEM IOWA CITY, IOWA</div>		<div>Date</div> <div>12-17-2012</div> <div>CONSTRUCTION DOCUMENTS</div> <div>Project No.</div> <div>DVA#636-311 S-H#110240-0</div> <div>DRAWING NO.</div> <div>2-P3</div> <div>Dwg. 7 Of 24</div>		<div>Veterans Administration</div>
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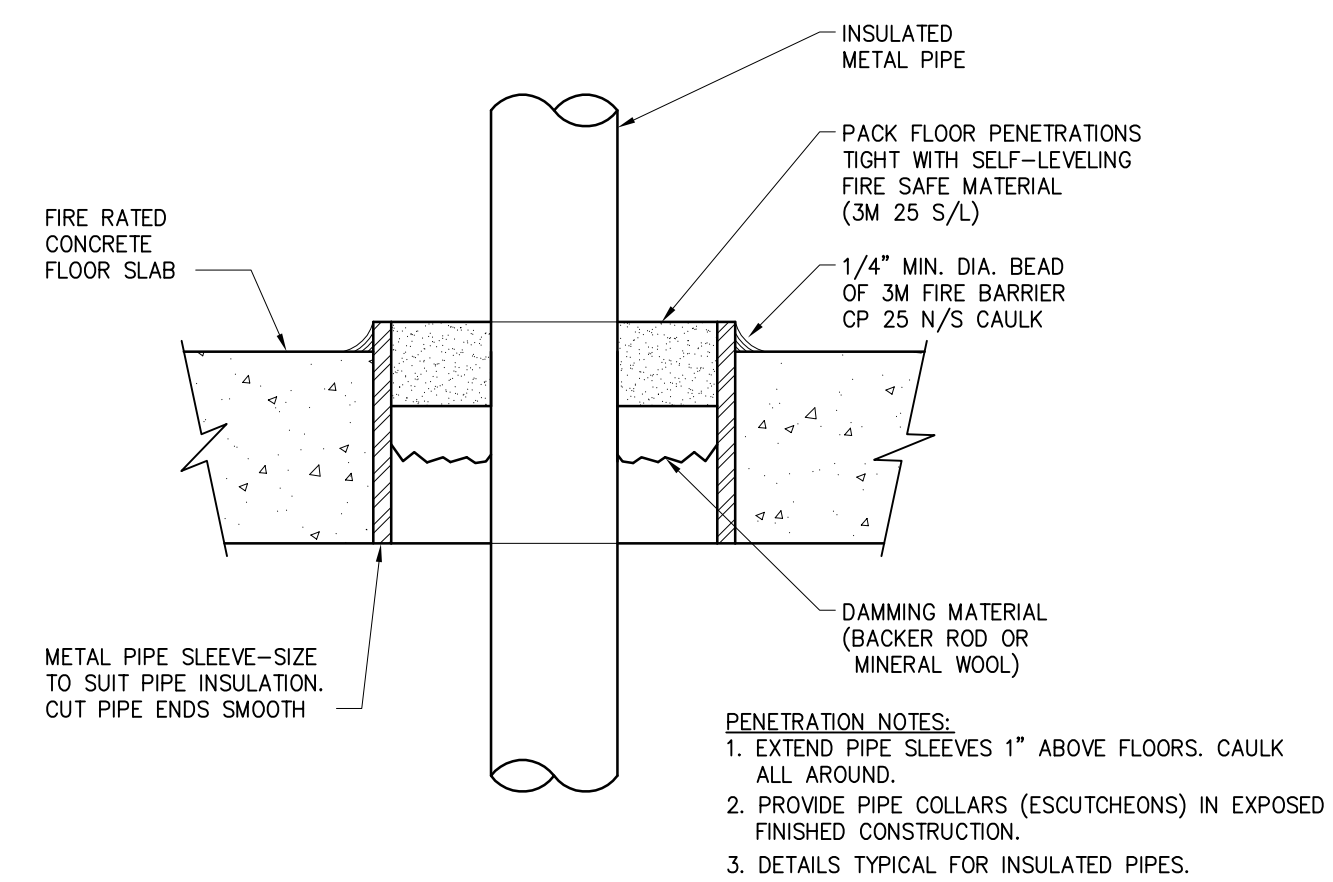
1 INSULATED PIPE HANGER DETAIL
NOT TO SCALE



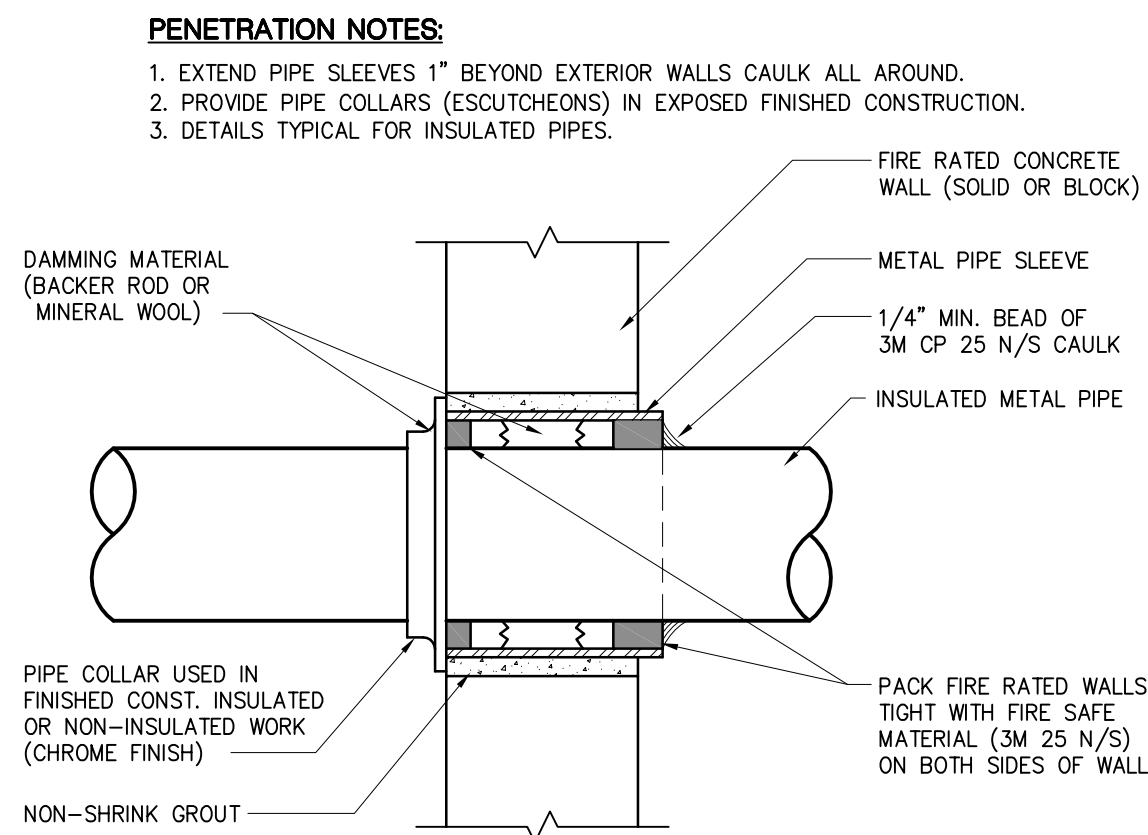
2 TRAPEZE TYPE HANGER DETAIL
NOT TO SCALE



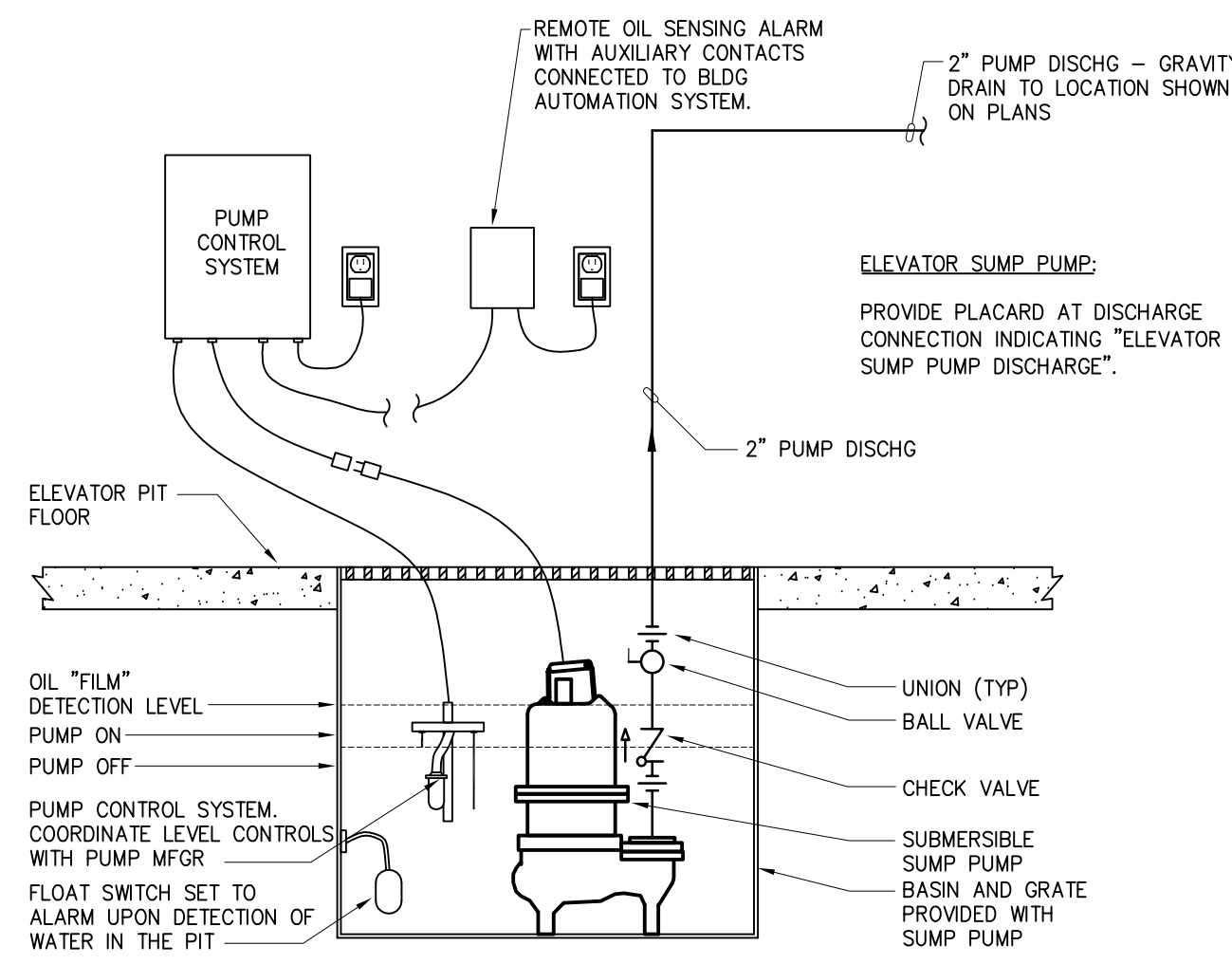
3 INTERIOR WALL PIPE PENETRATION DETAIL (THROUGH CONDITIONED SPACE)
NOT TO SCALE



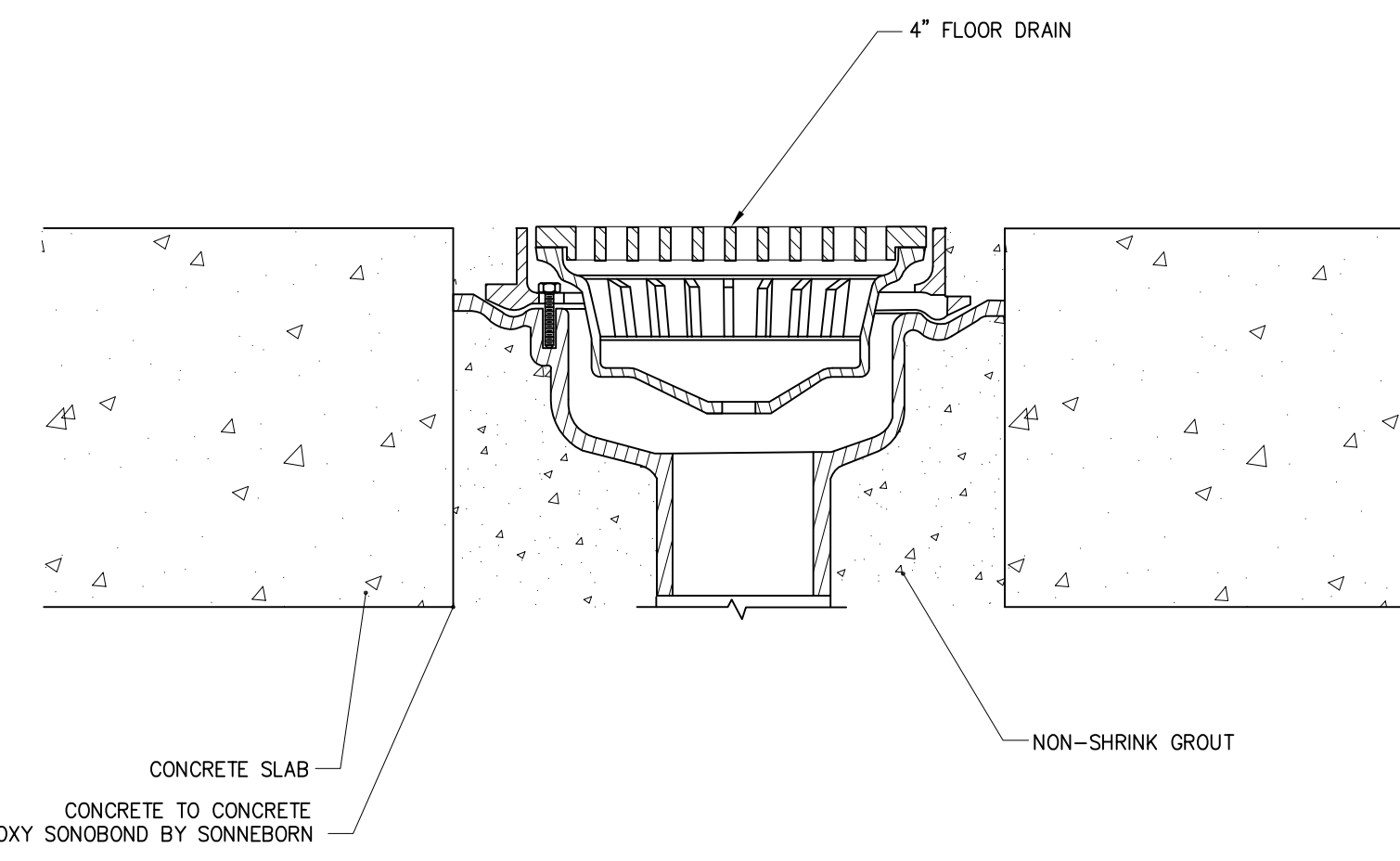
4 FLOOR PENETRATION DETAIL - U.L. # CAJ5001
NOT TO SCALE



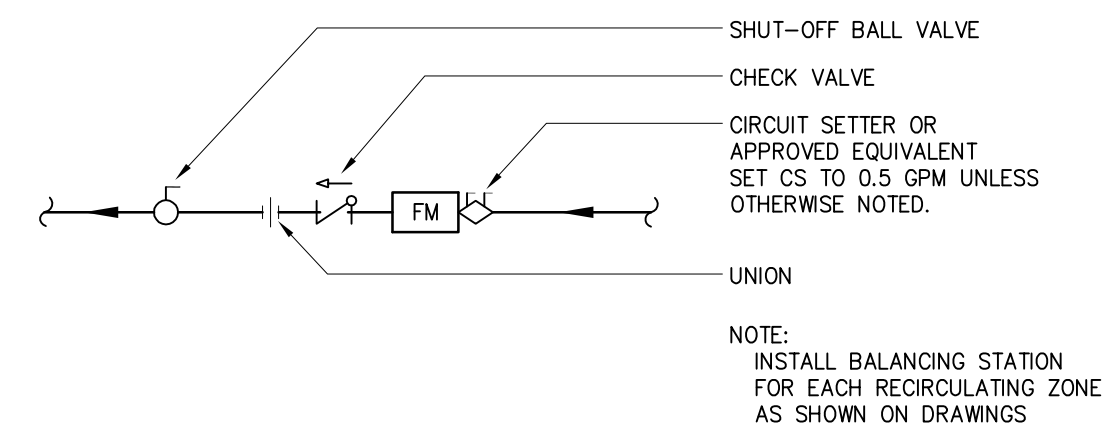
5 WALL PENETRATION - U.L. # CAJ5001
NOT TO SCALE



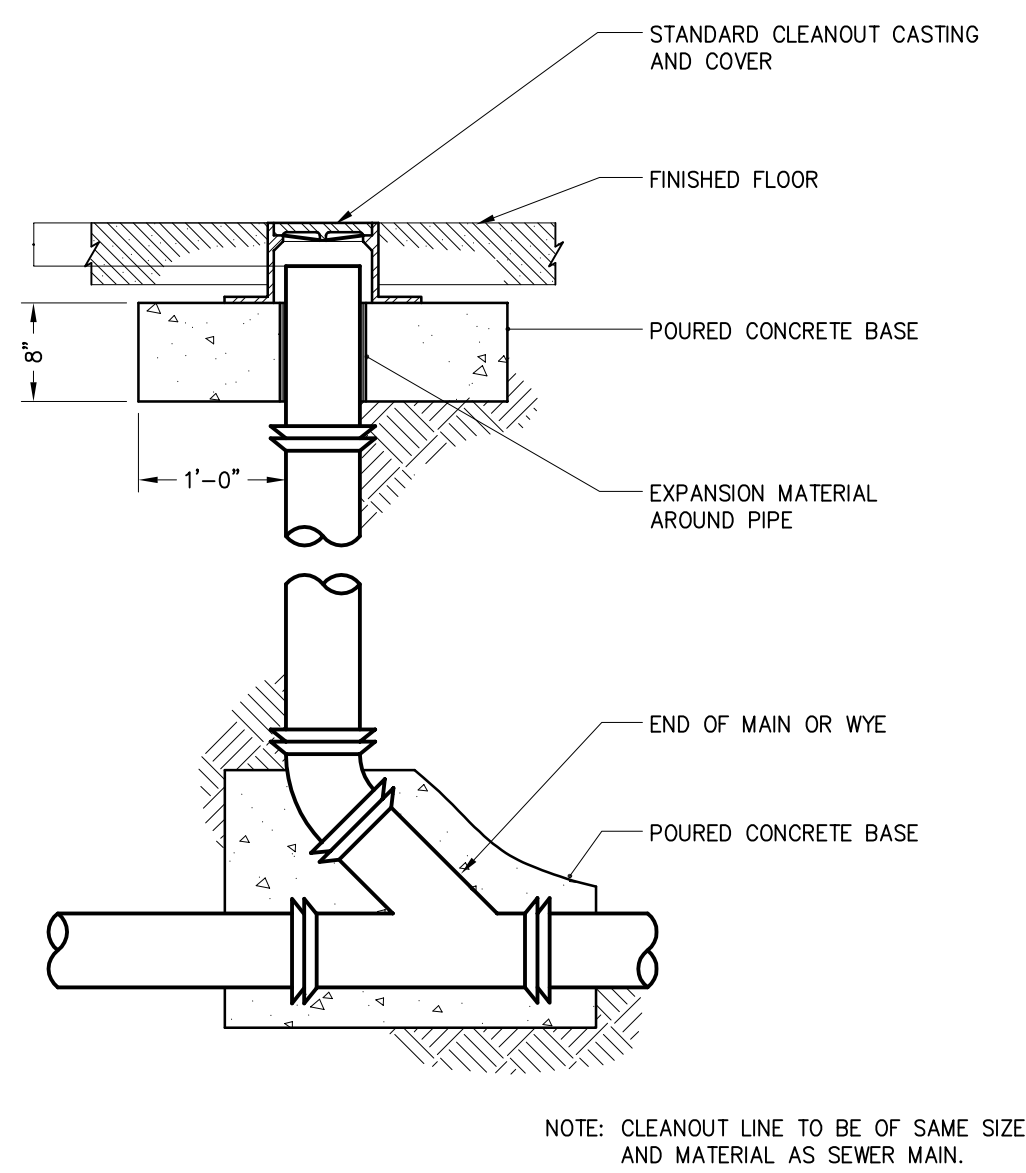
6 ELEVATOR SIMPLEX SUMP PUMP DETAIL
NOT TO SCALE



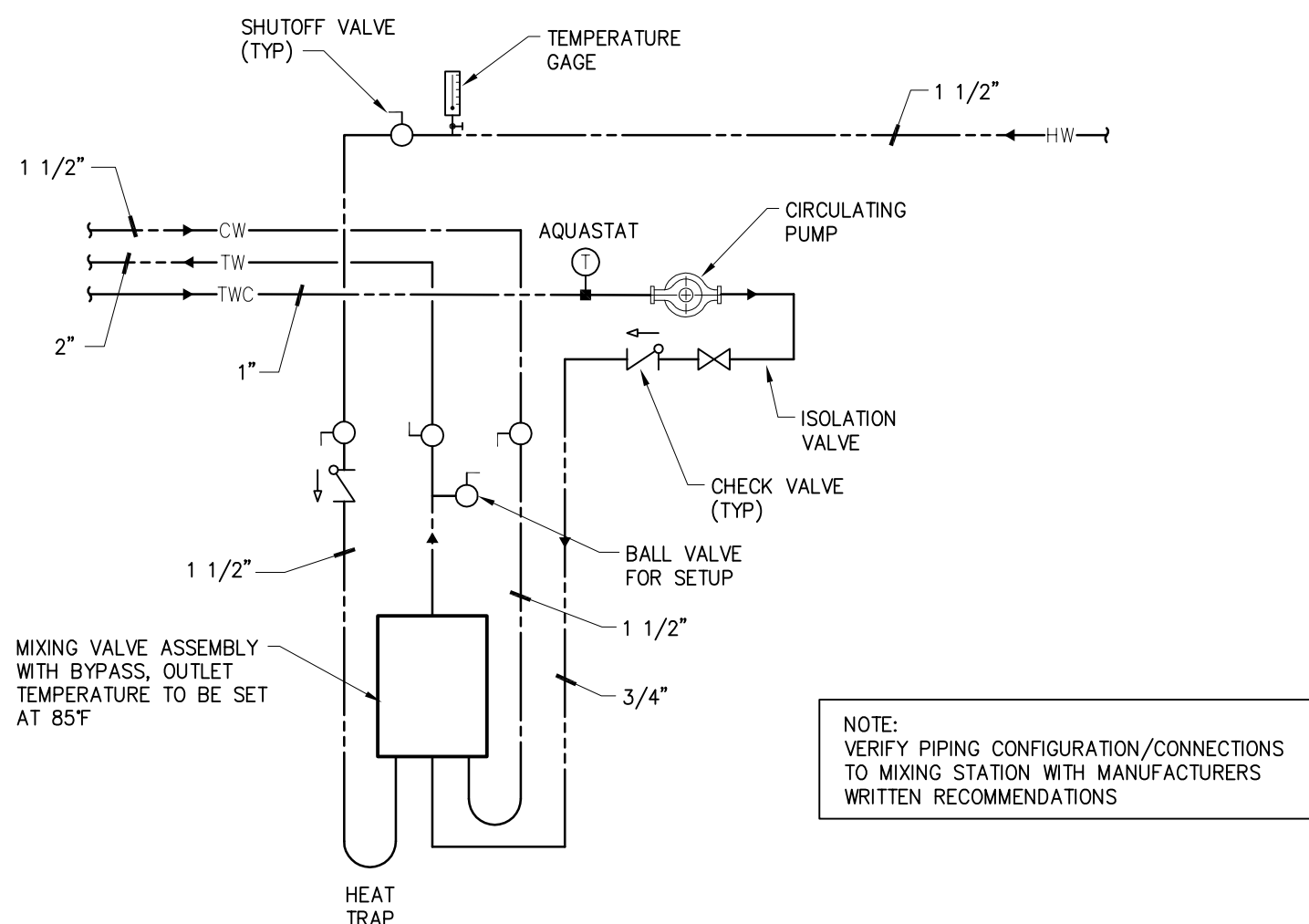
7 FLOOR DRAIN DETAIL
SCALE: N.T.S.



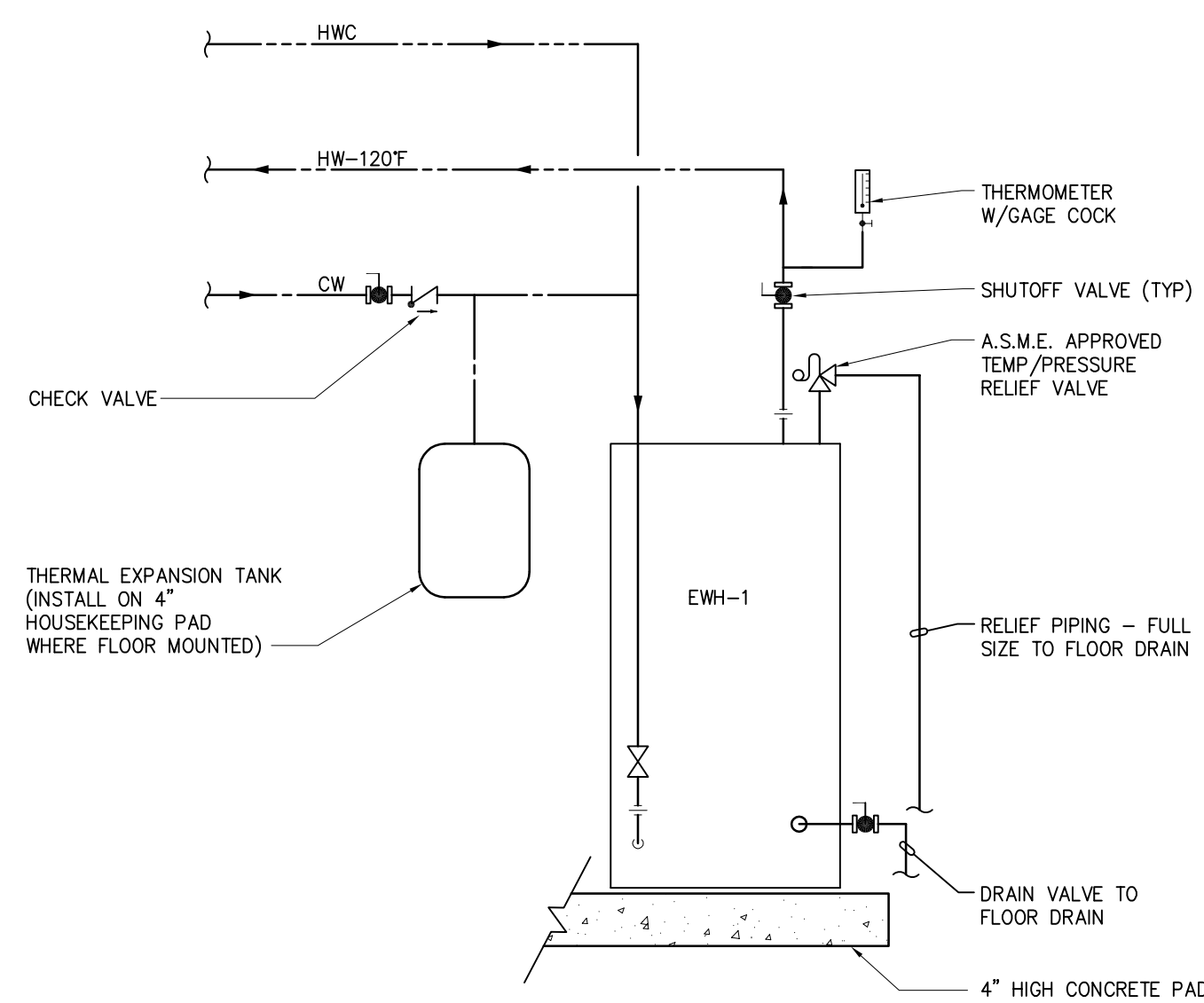
8 HOT WATER RECIRCULATING AND TEMPERED WATER RECIRCULATING BALANCING STATION DETAIL
NOT TO SCALE



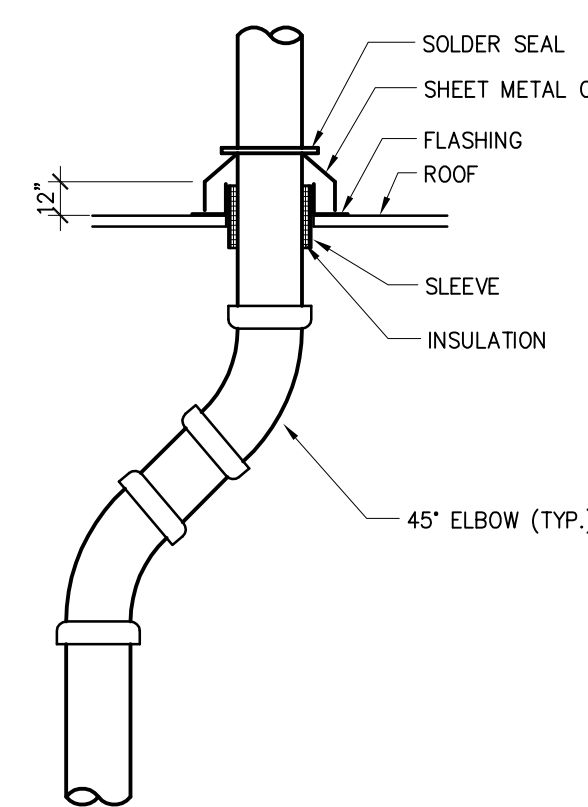
9 CLEANOUT DETAIL
SCALE = N.T.S.



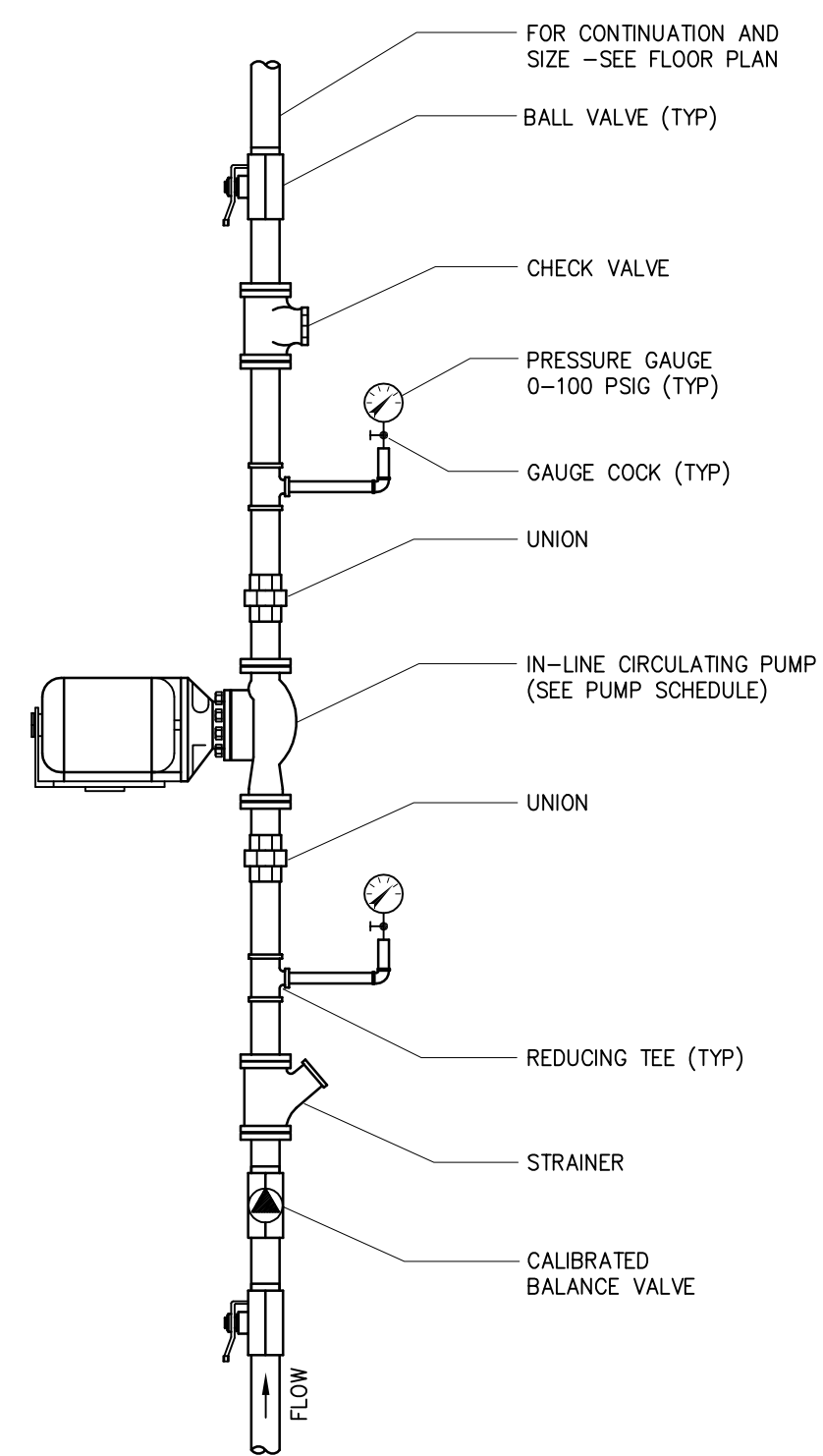
10 THERMOSTATIC MIXING VALVE FOR EMERGENCY SHOWER/EYE WASH PIPING SCHEMATIC
NOT TO SCALE



11 ELECTRIC WATER HEATER DETAIL
NOT TO SCALE



12 TYPICAL VENT THROUGH ROOF DETAIL
NOT TO SCALE



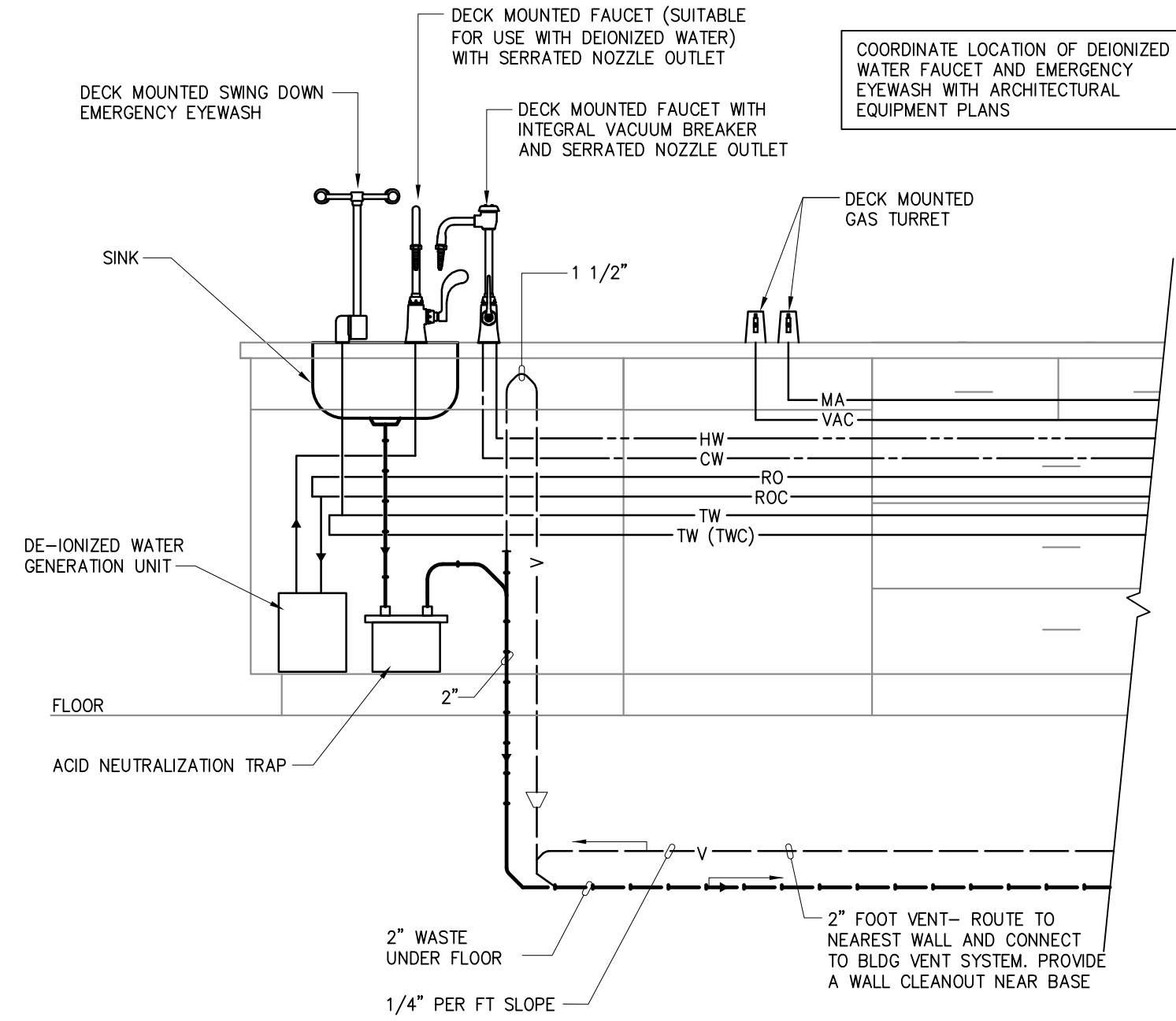
13 CIRCULATING PUMP DETAIL
NOT TO SCALE

LEGEND	
FITTINGS	
PLAN MARK	DESCRIPTION
	DIRECTION OF FLOW
	DIRECTION OF PITCH
	ALIGNMENT GUIDES
	PIPE ANCHOR
	AIR VENT
	CONCENTRIC REDUCER
	ECCENTRIC REDUCER
	FLEXIBLE CONNECTION
	STRAINER
	STRAINER W/ DRAIN
	UNION
	PIPE TRAP
	ELBOW DOWN
	ELBOW UP
	TEE TURNED DOWN
	TEE TURNED UP
	BLIND FLANGE OR WALL CLEANOUT
	PIPE CAP
	FLOOR CLEANOUT
	END RUN CLEANOUT OR PLUG CLEANOUT
	FLOOR DRAIN
	WALL OUTLET
	HOSE BIBB
	WALL HYDRANT OR FREEZE PROOF HOSE BIBB
	PRESSURE GAUGE
	THERMOMETER
	PRESSURE SENSOR
	TEMPERATURE SENSOR
	FLOW SWITCH
	FIRE ALARM SWITCH
	PRESSURE SWITCH
	AUTO VALVE ASSEMBLY
	BALANCE STATION
	FLOW METER
	VENTURI FLOW METER
	WATER HAMMER

LEGEND	
VALVES	
PLAN MARK	DESCRIPTION
	3-WAY CONTROL VALVE
	ANGLE GATE VALVE
	ANGLE GLOBE VALVE
	BALANCING VALVE
	BALL VALVE
	BUTTERFLY FLY VALVE
	CHECK VALVE
	GATE VALVE
	GENERIC VALVE
	GLOBE VALVE
	SAFETY RELIEF VALVE
	STORM/ OVERFLOW DRAINS

PLUMBING ABBREVIATIONS

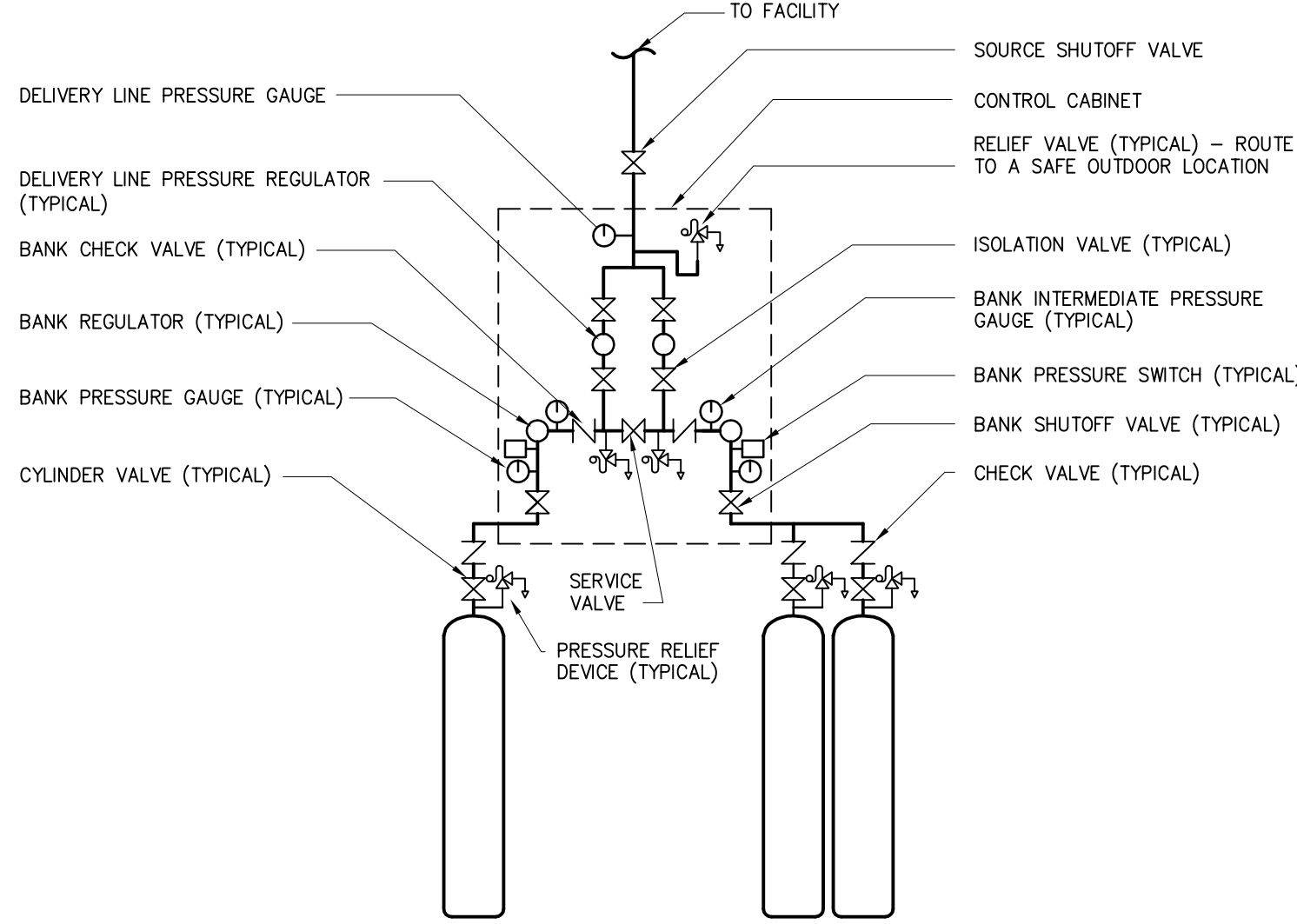
AFF	ABOVE FINISHED FLOOR
AHU	AIR HANDLING UNIT
CAP	CAPACITY
CW	COLD WATER
DN	DOWN
DI	DEIONIZED WATER
DIC	DEIONIZED WATER CIRCULATING
(D)	DEMOLISH
(E)	EXISTING TO REMAIN
FD	FLOOR DRAIN
GPM	GALLONS PER MINUTE
GAS	NATURAL GAS
HVAC	HEATING, VENTILATION, AND AIR CONDITIONING
HZ	HERTZ (FREQUENCY IN CYCLES PER SECOND)
HW	HOT WATER
HWC	HOT WATER CIRCULATING
IN	INCHES
IN WC	INCHES (WATER COLUMN)
LB	POUND
MA	MEDICAL AIR
MAX	MAXIMUM
MED	MEDIUM
MEZZ	MEZZANINE
MIN	MINIMUM
MU	MAKE-UP WATER
N	NITROGEN
OD	OVERFLOW DRAIN
OX	OXYGEN
PH	PHASE
PRESS	PRESSURE
PSI	POUNDS PER SQUARE INCH
PSIG	POUNDS PER SQUARE GAUGE
RO	REVERSE OSMOSIS
RD	ROOF DRAIN
RPM	REVOLUTIONS PER MINUTE
SF	SQUARE FOOT
SD	SANITARY DRAIN
ST	STORM DRAIN
TEMP	TEMPERATURE
TOT	TOTAL
TW	TEMPERED WATER
TWC	TEMPERED WATER CIRCULATING
TYP	TYPICAL
UL	UNDERWRITERS LABORATORIES
V	VENT
VTR	VENT THRU ROOF
W/	WITH
W/O	WITHOUT
W	WASTE [RISER TO FEED PLUMBING FIXTURE(S)]
WTR	WATER



- NOTES:
1. PROVIDE ACID WASTE AND VENT PIPING BETWEEN SINK AND ACID NEUTRALIZATION TRAP. PROVIDE TYPICAL WASTE AND VENT PIPING DOWNSTREAM OF ACID TRAP.
 2. NOT ALL ITEMS SHOWN ABOVE ARE REQUIRED AT EACH ISLAND COUNTER. REFER TO PLANS FOR ITEMS AND UTILITIES REQUIRED.

1 ISLAND SINK DETAIL

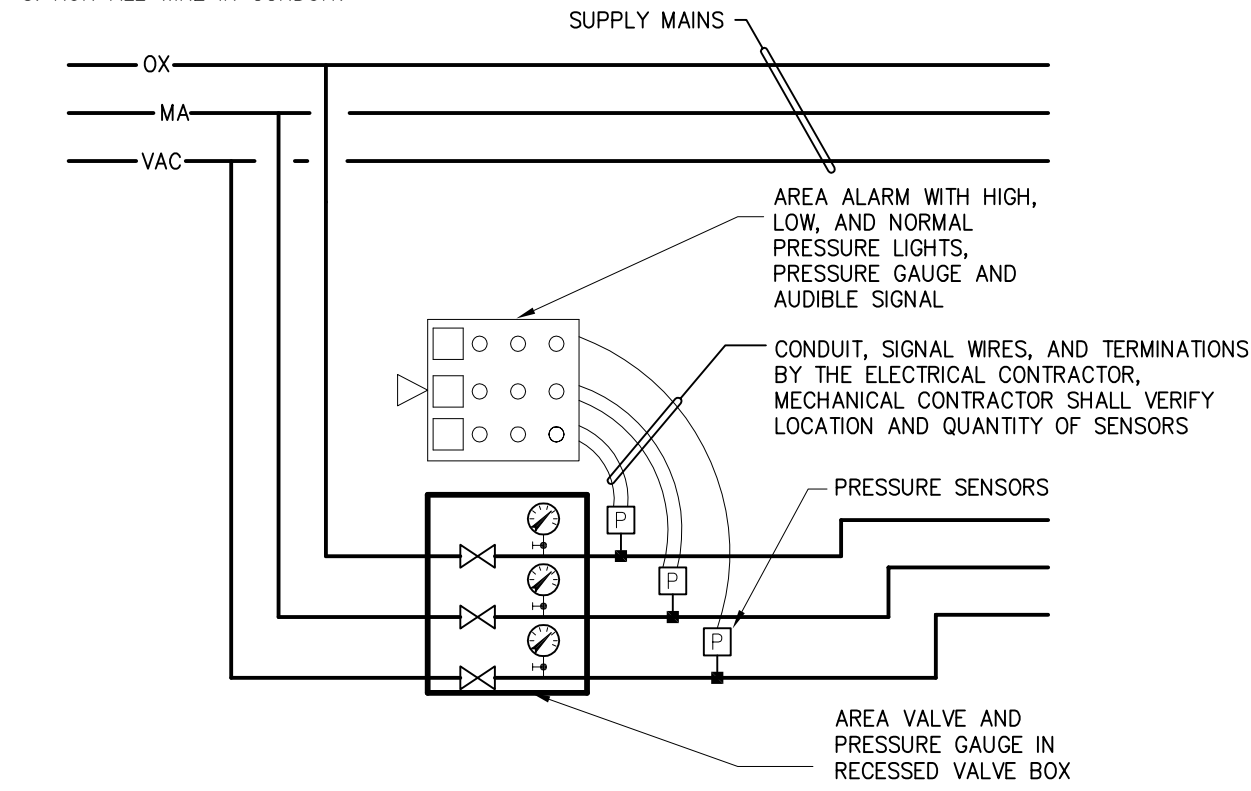
NOT TO SCALE



2 MEDICAL GAS CYLINDER PIPING DETAIL

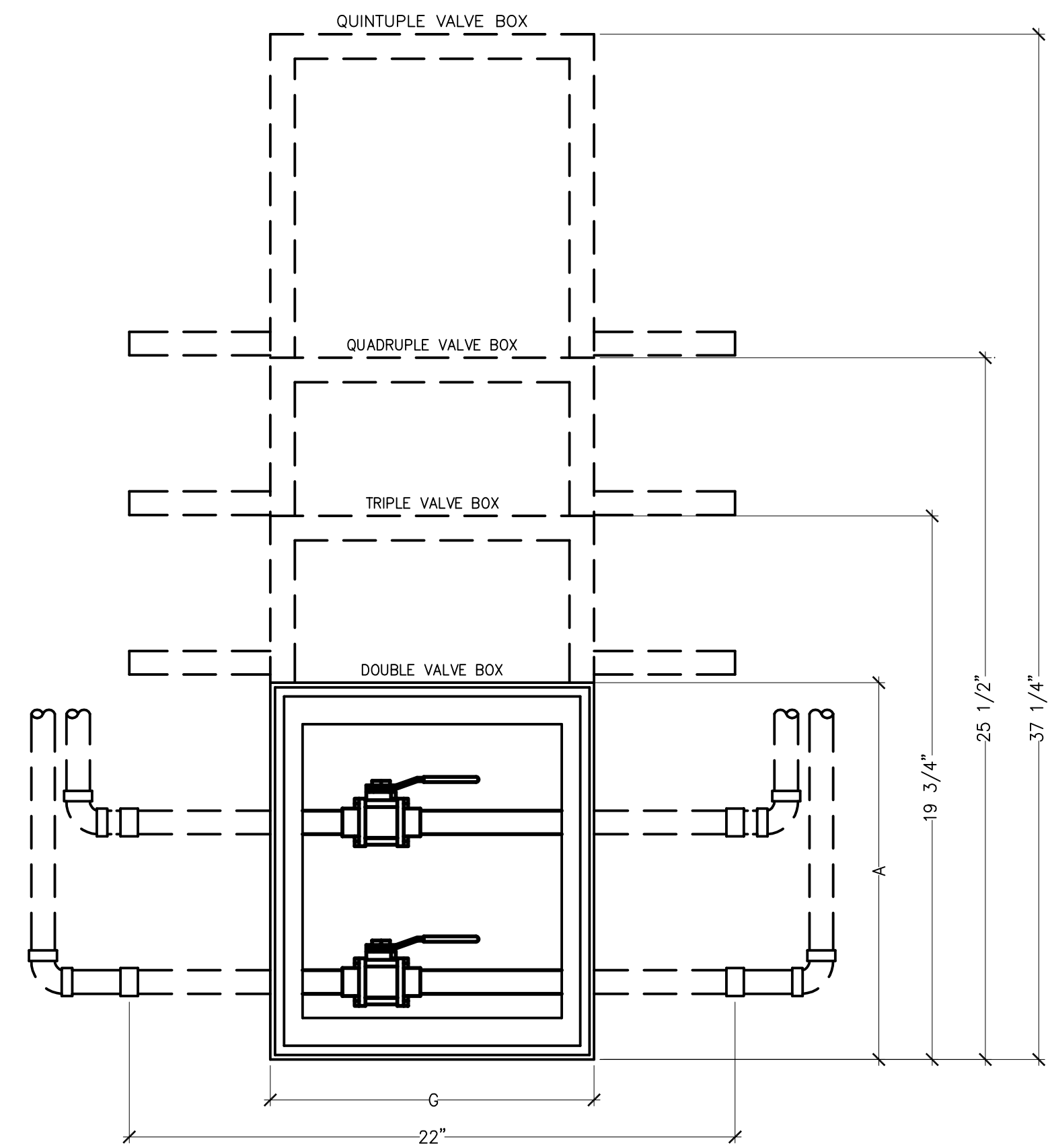
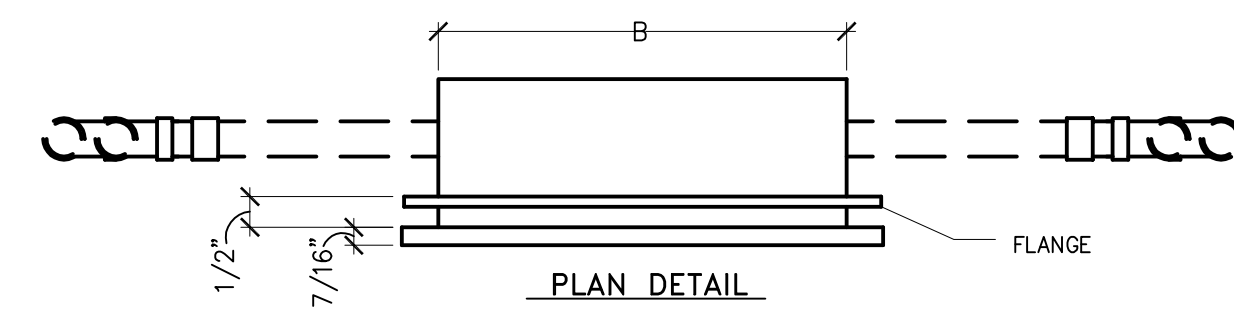
NOT TO SCALE

- ALARM NOTES:
1. PRESSURE SWITCH CABLE SHALL BE SHIELDED TWISTED PAIR CABLE.
 2. CABLE FROM PRESSURE SWITCH TO DESIGNATED PANEL SHALL BE A MAXIMUM OF 5000 LINEAL FEET.
 3. PRESSURE SWITCH LOCATIONS SHALL MAINTAIN A TEMPERATURE RANGE OF 40 TO 105 DEGREES FAHRENHEIT AND A RELATIVE HUMIDITY LEVEL NO GREATER THAN 95%.
 4. INSTALL THE ALARM SYSTEM PER NEC, CLASS II SIGNAL SYSTEM AND ALL APPLICABLE LOCAL CODES.
 5. RUN ALL WIRE IN CONDUIT.



3 AREA ALARM PANEL DETAIL

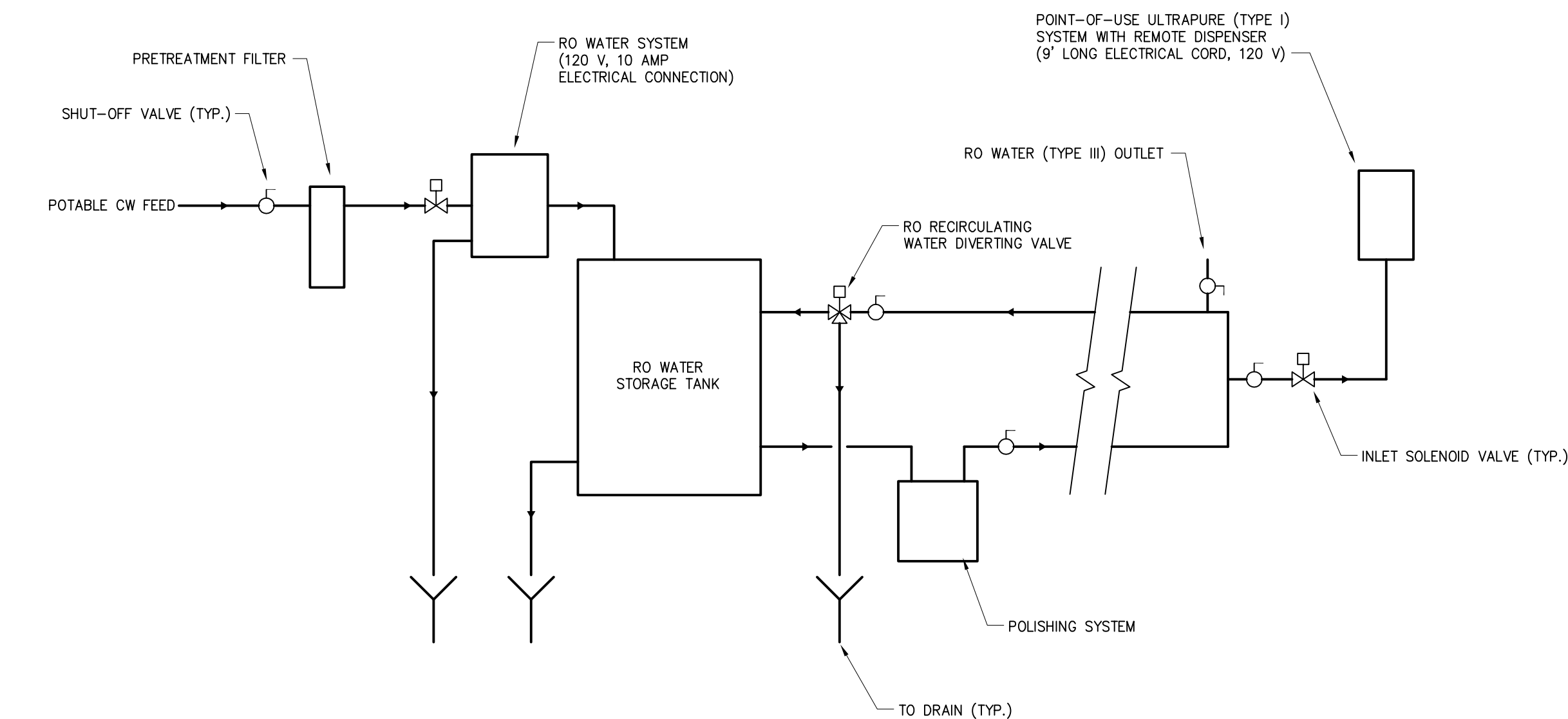
NOT TO SCALE



VALVE SIZE	A	B	C	D	E	F	G
1/2" THRU 1-1/4"	13 11/16"	10"	12 1/8"	5 13/16"	2 1/16"	2 1/8"	11 3/4"
1-1/2" THRU 2"	15"	11 13/16"	13 3/8"	6 9/16"	2 1/2"	2 5/8"	13 7/8"

4 RECESSED ZONE VALVE BOX DETAIL

NOT TO SCALE



5 RO/DE-IONIZED WATER FLOW DIAGRAM

NOT TO SCALE

SUMP PUMP SCHEDULE									
PLAN MARK	CAPACITY (GPM)	HEAD (FT H2O)	MOTOR DATA			BASIN	REMARKS		
			HP	VOLTS	# RPM				
SP-1	100	25	1/2	120	1 3450	24" x 24" DEEP WITH GRATED COVER			

- NOTE:
1. PUMP SHALL BE CAPABLE OF PASSING A 2" SOLID.
 2. PROVIDE SIMPLEX CONTROL PANEL, REMOTE ALARM PANEL AND OIL DETECTION SWITCH. REMOTE ALARM PANEL SHALL PROVIDE SEPARATE ALARM SIGNALS TO BUILDING AUTOMATION SYSTEM FOR DETECTION OF OIL, WATER (SUMP PUMP ON) AND HIGH LIQUID LEVEL.

WATER HEATER (ELECTRIC) SCHEDULE									
PLAN MARK	STORAGE (GAL)	RECOVERY (GPH)	IN T	OUT T	KW INPUT	VOLTS	# HZ	REMARKS	
EW-1	120	369	40	120	90	480	3 60	5 ELEMENTS, 18000 WATTS EACH	

- NOTE:
1. WATER HEATER SHALL BE "ENERGY STAR" RATED.

DOMESTIC WATER EXPANSION TANK SCHEDULE					
PLAN MARK	SYSTEM SERVED	TYPE	TANK CAPACITY (GAL)	ACCEPTANCE CAPACITY (GAL)	REMARKS
DWET-1	DOMESTIC CW	DIAPHRAGM	6.4	3.2	FDA APPROVED LINER

RECIRCULATING PUMP SCHEDULE									
PLAN MARK	SYSTEM SERVED	TYPE	GPM	HEAD (FT)	SHUTOFF HEAD (FT)	MOTOR DATA			REMARKS
						HP	VOLTS	# RPM	
HWCP-1	DOM. HOT WATER	IN-LINE	20	35	55	1/2	120	1 1800	WATER HEATER CIRCULATOR
HWCP-2	TEMPERED WATER	IN-LINE	6	15	30	1/12	120	1 1800	THERMOSTATIC MIXING VALVE CIRCULATOR

Revisions

Date

SHIVEHATTERY

ARCHITECTURE+ENGINEERING

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319.354.3040 | fax: 319.354.6921 | shive-hattery.com
Iowa | Illinois | Missouri

Drawing Title

PLUMBING SCHEDULES AND LEGEND

Approved: Division Chief

Approved: Service Director

Project Title

RENOVATE AND EXPAND SPACE FOR PATIENT SUPPORT AREAS

Building Number

2

Checked

TRF

Drawn

MSJ

Location

IOWA CITY VA HEALTH CARE SYSTEM
IOWA CITY, IOWA

Date

12-17-2012

CONSTRUCTION DOCUMENTS

Project No.

DVA#636-311

S-H#110240-0

Drawing No.

2-P6

Dwg. 10 of 24

Veterans Administration